THE FARMER'S MAGAZINE:

FEBRUARY 1807.

(No. XXIX.)

BRANCH I.

ORIGINAL COMMUNICATIONS.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

Observations on Dr Coventry's Pamphlet on Live Stock.

SIR, *Barmoor Castle, Northumberland, Dec.* 8. 1806.

SOME time ago, I heard of a pamphlet published in Edinburgh, entitled, 'Remarks on Live Stock,' by Dr Coventry, the Professor of Agriculture, which I have lately perused with much attention. I find from the preface, that the author was induced to give these remarks to the public, from a wish of republishing, in Scotland, a pamphlet by that eminent surgeon Mr Cline, on the 'Formation of Domestic Animals.' Conceiving Mr Cline's observations to be of the *greatest importance*, and finding that this pamphlet was not to be procured in Edinburgh, he therefore publishes such excerpts from it as he thinks most deserving of attention, and concludes with some remarks of his own.

Now, Sir, very different were the sensations which this pamphlet of Mr Cline's caused in me; for, so far from wishing to recommend to the public, I did all I could to suppress it; and if I had not found it little known, except to eminent breeders, to whom such doctrines could do no harm, I should certainly have stated my objections at the time it was first published.

So far from wishing to throw cold water on the exertions of any one in the cause of agricultural improvement, I trust the world will allow me the credit of doing every thing in my individual power to promote and encourage them. Sure I

am, that, on most subjects connected with agriculture, I know few men whose opinion I should pay more deference to than Dr Coventry's; but, on the improvement and management of live stock, (even if he had not published these Remarks), I could not so easily submit to him. I indeed acknowledge with pleasure, that no man has paid more attention to agriculture, in the strict sense of the word, than he.

'Quid dicam, jacto qui semine comminus arva
Insequitur, cumulosque ruit malè pinguis arenæ,
Deinde satis fluvium inducit rivosque sequentis;
Et, cum exustus ager morientibus æstuat herbis,
Ecce! supercilio clivosi tramitis undam
Elicit? illa cadens raucum per levia murmur
Saxa ciet, scatebrisque arentia temperat arva.'

In Scotland, he is in the very garden of agricultural improvements; though there is hardly a district where breeding is in any way attended to, and none, that I know of, (leaving Tweedside out of the question), where a systematic plan is carried on, except in the West Highlands. There, indeed, I was surprised and gratified, but not satisfied. I saw improvements carrying on, beyond any idea I could form on the subject. The Duke of Argyle, Mr Campbell of Shawfield, Mr Malcolm of Duntroon, Mr Macneil of Colonsay, and many others, are doing wonders;—in fact, turning a chaos into a new world. I should be wanting in candour, were I not to mention the island of Islay in particular. I there saw, under Shawfield's management, crops equal to any in East Lothian, not on hundreds of acres, but on thousands. Yet there was *that something wanting*, that *close attention*, without which, in my opinion, no breed of animals can be brought to perfection.

If this catches the eye of a South-country breeder, he will be surprised when I tell him, that at all these noted places, so long famous for the breed of black cattle, it is almost impossible for their cow-herd to tell you whether such a cow is in calf to a red bull or a black one, or if she is to calve in November or the January following. I hardly saw a herd of cows without two, sometimes three or more bulls amongst them. Some few they may be rather more particular with—I am only speaking of the general custom.

All they seem to aim at is, to breed them of the largest size, and, consequently, what they term the strongest. That this breed is the most profitable of any, and can be brought to the greatest perfection, I have not the smallest doubt; and, for that purpose, have selected a few of the best, which, under improved management, will shortly speak for themselves.

I beg pardon of my Highland friends for these observations, and doubt not they will forgive me.

But to return to my subject. Confident as I am, that no man understands the anatomy of the human frame, or even of animals, better than Mr Cline, still I have no idea that a surgeon, constantly employed in London and its environs, can be a proper person to interfere with a study of such national consequence as the management and improvement of live stock; for, I verily believe, his farm stock consists of a pair of job-horses, a couple of hacks, and, possibly, a terrier or coach dog. Of *dead* animals I am mute.

If a man of the undoubted talents of Mr Cline would turn his attention to the diseases of animals and their cure, then, indeed, would I allow him every credit, and be the first to acknowledge my obligations.

Although many of Mr Cline's observations, and Dr Coventry's remarks, are replete with ingenuity, still they are by no means applicable to the present system adopted by eminent breeders and graziers. They contain opinions that have long since been exploded; and had either of them lately visited any of the breeding counties in England, they would have found how erroneous were the ideas they had formed.

Mr Cline says, page 13th, speaking of horns, &c.—

'To thoſe who have not reflected on the ſubject, it may appear of little conſequence whether ſheep and cattle have horns; but, on moderate calculation, it would be found that the loſs on farming ſtock, and alſo in the diminution of animal food, is very conſiderable, from the production of horns and their appendages, viz. a *thick ſkull.*'

Now, I must confess, I should be sorry to allow myself to be called one of the *horned race;* but still my skull is so thick, that I cannot find out the smallest ingenuity in this argument, without he meant it as a pleasant story to amuse the ladies, or some unfortunate reader of his book, who may not think a treatise on live stock over-entertaining.

This may be the *fanciful* idea of an anatomist while dissecting a skull, but of neither the grazier nor breeder. The largest sheep, I allow, have no horns; but the case is different with cattle. *Vide* Hereford, Teeswater, Leicestershire long horns,—and last, though not least in value, my friends the West Highlanders; which breeds, with all their horns, length of hair, and thickness of hide, fatten sooner, and on less food, than any other.

Mr Cline forgets, that if such a hornless race of animals were to be generally propagated, we should have as great a want of handles for knives and forks, as there would be for a leg of mutton, and a coat for a poor man's back, were the Marino sheep to turn out of repute our breed of Leicesters.

Again, page 17th, Mr Cline, on 'improvement of form and breeding animals of the same family, *alias* in and in.'

'It has been generally ſuppoſed, that the breed of animals is improved by the largeſt males. This opinion has done conſiderable miſchief, and would have done more, if it had not been counteracted by the deſire of ſelecting animals of the beſt form and proportions, which are rarely to be met with in thoſe of the largeſt ſize. Experience has proved, that croſſing has only ſucceeded, in an eminent degree, in thoſe inſtances in which the females were larger than the males. If a well formed, large ram, be put to ſmaller ewes, the lambs will not be ſo well ſhaped as their parents; but if a ſmall ram be put to larger ewes, the lambs will be of an improved form.

'The ſize of the fœtus is generally in proportion to the male parent, &c.; and therefore, when the female parent is diſproportionally ſmall, the quantity of nouriſhment is deficient, and her offspring has all the diſproportions of a ſtarveling.'

He might as well affirm, that a French *petit-maître* and a Musſelburgh fish-wife would have a handsomer family of children than a stout athletic Highlander and a beautiful little woman.

But, if this were the case, what would be the consequence of breeding *in and in*, which is a custom much adopted of late, instead of crossing? The time would shortly come, when, by his own doctrine, the produce would be increased in size; and, upon a man selecting a ram bred from his own flock, and putting him to that flock to breed again, he would be rejected. His own parent might say, 'Oh no! you are too big for me; I must have a small husband; your fœtus will be too big for me to nourish;' so that, in the end, you would just land where you set out.

If this is the true plan of breeding, why do we all pay so much attention to have our male stock in the highest perfection, of the most robust constitution, although, at the same time, with every symmetry of make? Did the author ever hear of a Leicestershire breeder shewing his ewes in preference to his rams, and talking of them as the first thing to be attended to? Did he ever see the produce of a small Highland cow and a Teeswater bull?

I shall conclude this already too extended epistle with a remark of Dr Coventry's. (p. 72.)

'In ſome diſtricts, as in Berwickſhire and Northumberland, (here he ſtrikes home), the beſt paſturage is *invariably* given to the aged, and what then ſhould be the fattening ſtock. Neither, excepting for the purpoſe of improving a portion of the ſtock to breed from, would it be right to *pamper* them when young, becauſe it would be throwing away what could be more profitably expended otherwiſe. The quantity of good aliment neceſſary to fatten an animal when young, is found to be much

much greater than what would be sufficient to do this when it is more advanced in life.'

In answer to this, I positively affirm, that all the best graziers and breeders in the two *quoted* counties, are striving who can *first* bring their stock to market; and the universal toast is, *early maturity.*

Now, I deny the possibility of bringing early stock to market, if you do not, from the hour of weaning them, give the best pasturage, and every indulgence in your power, which are the only means to keep up that *condition, or fat*, they receive from their mother's milk, and which, if once lost, cannot be regained for many months in sheep, and even years in cattle. 'Starve an animal when young, and you will lose a year.'

I have thus, Sir, taken the liberty of pointing out what I conceive to be errors in the opinions of these two authors; and should you think my arguments well founded, and worth the attention of the public, you will do me the honour of inserting this letter in your next Magazine.

I am, Sir, your obedient humble servant,

FRANK SITWELL.

FOR THE FARMER'S MAGAZINE.

Essay given in to Eddlestone Club, 8th August 1806, *on the Thirlage Act.*

THE question proposed for this night's debate is, *What are the reasons which have prevented the Act 39th of Geo. III., for Commutation of Thirlage, from being commonly, if at all, acted upon?*

When we consider the universal outcry against thirlage, which, in fact, was the cause of the application to Parliament for its commutation, it might have been presumed, that not a moment would have been lost in claiming the benefit of this act; and, now, when seven years are elapsed since it was obtained, that not a vestige should have remained of this obnoxious grievance; more particularly, when we consider the simplicity and unexpensive nature of the process required to obtain redress,—by an application to the Sheriff of the county,—and through the equitable award of a jury. And yet, true it is, that not one application has been made for the benefit of this act to the Sheriff of this county; nor any where else, so far as I can learn.

Whence can this have happened? Is it owing to any deficiency in the act itself? In that case, the influence of the Highland Society, through which it was originally obtained, might

easily procure an amendment. If it is owing to no deficiency in the act, it would then seem that the grievance proposed to be redressed had been purely imaginary, and that an act of Parliament upon such a subject was nugatory, and ought not to have been applied for.

It is worth while to consider the nature of the supposed grievance of thirlage, and of the act intended for its redress, in order to discover the reason, if possible, why, since the passing of this act, matters continue upon the same footing as before the enactment.

The following essay shall be thrown into the form of a commentary upon the act.

Preamble to the Act.

In the preamble, thirlage is represented *as being found, in experience, to be very unfavourable to the improvement of the country, by checking the industry of the occupiers of the ground, and by occasioning troublesome and expensive litigation.*

1*st*, Thirlage is here represented as *checking the industry of the occupiers of the ground.*

Upon this head, it may be observed, that whatever tends to harass and disquiet an industrious man, and to render him dissatisfied with his situation, has an evident effect to dispirit and depress his industry.

We have all had occasion to observe the dispiriting effects of domestic disquietudes. A sulky, discontented wife, continually grating upon the feelings of her husband by the asperities of her temper, instead of encouraging him by cheering looks and complacent manners; or, an idle profligate family, dissipating his earnings in extravagance, and rendering all his labours for their welfare vain; such sources of disquietude have often entirely damped the industry of the head of the family, and driven him to the alehouse for relief. For such domestic checks upon industry, an act of Parliament, in all its omnipotence, can indeed afford no remedy; and what cannot be cured must even be patiently endured.

The power of Parliament can extend only to the constitution of civil rights. But, though morally limited to the bounds of *what is right and fit*, it is certainly paramount to the regulation, or to the absolute dissolution of all such rights as rest, for their support, merely upon *the authority of positive law*; under which description may be comprehended thirlage, together with all other exclusive rights to employment, and all exclusive privileges of monopoly.

Wherever a manufacturing or commercial enterprize is not of that

that extent of magnitude as absolutely to require the advantage of monopoly to carry it on, every monopoly granted may well be considered as a grievance. It oppresses those that are without the pale of the monopoly, in excluding their industry, in contradiction to liberty, from that channel over which the monopoly is erected, and makes the articles comprehended under the monopoly come dearer to those that need them. Neither do the advantages to the privileged keep pace with the disadvantages accruing to those excluded; for the security of those who rest upon their exclusive privileges, has a natural and necessary tendency to slacken industry and enterprize, by removing that free competition which is the natural stimulant to exertion; accordingly, monopolizing companies have never been observed to thrive remarkably.

This reasoning is of very extensive application. Let us apply it, at present, to all exclusive rights to employment, of which thirlage to mills is one particular instance.

In every species of industrious employment, where the object to be gained is merely profit, and not high fame and reputation, the only effectual enforcement of diligence and honesty, is the necessity of pleasing employers in order to secure the continuance of employment. Remove this keen spur of interest, and there remains no other stimulus to exertion, but the mere conscience of duty. Now, however highly I conceive of the dignity of human nature, and highly as we may have seen it exemplified in a few particular instances, I would trust much more for its proper display, when the excitement of a great name, to be obtained in particular situations, or of interest, properly so called, in situations of obscurity, concur with a sense of duty to enforce that display, than where there exists no further excitement than a mere solitary sense of duty. I would, in short, trust more to men's acting aright, when placed in such circumstances that they *will do so*, than when so placed that they merely *ought to do so*. Regulations and laws which merely *ought to be observed*, never will be so punctually attended to as those which, as we say, *execute themselves*.

Let us apply this reasoning more particularly to this particular species of exclusive right to employment, thirlage to mills. The privileged miller, no doubt, *ought, in conscience*, to give satisfaction to all equally that employ him, whether they are free to leave him merely upon their dissatisfaction with his work, or whether forced to abide by him, satisfied or not, with no security but that of recovering such damage as they can *legally instruct* themselves to have sustained through his negligence or knavery. But, *will he do so?* Would any one consider himself as sufficiently

ently secured of the miller so doing, though he had no other tie upon him but merely that of his own conscience? Would there be no just ground of suspicion that the miller might listen to the suggestions of the devil, and persuade himself, that a too rigid and scrupulous adherence to justice, would convict him of the *legal spirit* of aiming at justification by good works? In his obscure situation, we cannot expect that a mere manufacturer of grain should be excited to a complete fulfilment of duty, far less to a supererogation exceeding all ordinarily experienced measures of fulfilment, like a Pitt or a Nelson, through the lofty ambition of a high and lasting renown. This interest, properly so called, is the only stimulus to exertion, which in his obscurity can reach him, to quicken the otherwise more languid sense of duty; and his *lasting interest* undoubtedly must be found in obtaining a constant sufficiency of employment, which, where absurd regulation intervenes not, must depend entirely upon the satisfaction given to his employers, by his skill, industry, honesty, and obliging manners. Establish a free competition, and these are of course secured; convey an exclusive right to employment, and the matter rests entirely with the miller's conscience; in the first instance, he is under a law *that executes itself*; in the other, he is under a law *that ought, indeed, to be observed*, which is the utmost that can be said as to the security of its observance.

Theory, founded upon merely collateral experience, in strongly analogous cases, may, without precisely identical experience, be considered as verified in fact: but here, both theory and identical experience, concur in constituting thirlage a grievance. The sauciness, the disobliging, unaccommodating behaviour of millers, resting sullenly secure in their exclusive right to employment, to all those under their thirle—their needless waste of the time of such bonded employers, in unnecessary attendance, which might often be spared by attention to their accommodation—their careless waste of their grain, and regardlessness of the perfection of its manufacture—in short, their literal confinement of their exertions for such customers, to such limits as shall merely clear them of the lash of the law for gross negligence; or even the sly purloining of such portions as may escape legal detection, under security that mere suspicion of such practices will not entitle the bonded employer to withdraw his custom. All these sources of grievance and vexation to the occupiers of adstricted lands, have been long and loudly complained of. Such vexations in this forced and uprofitable manufacture of the produce of his industry, are highly discouraging to the occupiers of ground, and constitute a sufficient reason why this act for commutation of thirlage should have been applied for.

2*d*, In the preamble to the act, thirlage is further characterized, as *occasioning troublesome and expensive litigation.*

Besides the constant vexatious suspicion in the thirled person, that he may come to loss through the negligence, or even dishonesty which the privileged miller may securely practise, without fear of losing employment; cases may also occur, where the waste or abstraction may be so glaring, through the smallness of return from the mill, as to convert this suspicion into certain belief. But a process for forfeiture of the right of adstriction, would not have been competent, even upon the footing of such lesion, however gross, or however capable of the clearest legal instruction: All that could have been obtained, even upon supposition of a successful process, would have been merely indemnification for the loss sustained in that instance, if originating in mere negligence; or the hanging of the miller, if it occurred through fraud; and the adstricted person must have contented himself to continue being subject to the like risks as before. Meanwhile, to instruct the negligence which might have been triumphantly displayed by the privileged grain manufacturer, in the insolent use of power, or the dishonesty which might have been practised by an arch rogue, who, with the fear of the gallows before his eyes, had dexterously guarded his practice against every mode of legal detection; such instruction might, indeed, have occasioned much troublesome and expensive litigation, which, too, might probably have proved ultimately fruitless. Against the depredations of other plunderers, men secure their property by preventing it from ever getting into their possession; here, the depredator is invested in a legal title, to become custodiary of the goods from whence he means to purloin. Indeed, in all cases where there is no power of prevention of damage by precautionary measures of security, the mere certainty of redress, where damage can be legally instructed, gives but a frail assurance to the inviolability of property.

The extent of the right of adstriction might also prove a fertile source of troublesome and expensive litigation.

Supposing, for instance, in the original constitution of a thirlage, that a barony was thirled, in general, to a certain mill, *for all the meal consumed in the whole families residing upon it*; that, for long use and wont, a given number of families had resided upon it; but (which is the most common supposition) that, in consequence of better farming, the number of families had been reduced, by the union of small farms; shall the extent of grain obliged to be manufactured at that mill continue to be as large as what used formerly to be manufactured? or shall it be circumscribed, by a literal interpretation, to that much less quantity

tity now *consumed* by the smaller number of families? Or, reverse the supposition to that of a still more minute subdivision of farms taking place (in consequence of manufactures, and the demand of carters and carriers) than what prevailed at the original constitution of the thirle, shall it suffice to manufacture as much grain as was wont to be manufactured? Or shall the exclusive right of manufacture be extended over the larger quantity now *consumed*, by the increased number of residing families?

But, further, it is commonly supposed, and as I believe justly, that land laid off for grazing or meadow, is no more subject to thirle, than fattening pasture grass, or its produce, is to tithe in England. Would it then be in the power of the proprietor of an adstricted barony to defeat the thirlage entirely, by converting his lands into pasturage? Or, suppose the thirlage (which is a common enough constitution of it) to extend to *all oats grown upon the barony*, with exception merely of seed and horse corn; and that, in regard to the grains of bear and peas, it extends no farther than *to what is consumed by the residing families*. A temptation is here presented, to the proprietor of the adstricted lands, to defeat the extent at least of the thirlage, by substituting (in sowing off his improved outfields for pasture) a crop of beer, for which such lands are very unfit, to a crop of oats, to which they are much better adapted; and, indeed, I have known such bad husbandry adopted in fact by an adstricted proprietor, emulously and to his own hurt, through the grudge of allowing the proprietor of the thirlage to participate in advantages to which he had contributed nothing: is there, in such case, no claim for abstracted multures? Or would the law, in order to vindicate the profits of the proprietor of the thirlage, deprive the other proprietor of option, and enforce upon him, against his will, what is supposed a better mode of cropping?

From these specifications, it will readily appear what a subject of litigation thirlage might prove; and, if it did not give birth to actual lawsuits, what a fertile source it may be of litigious practices.

Inferior causes of litigation might arise;—from the mill being out of repair in its machinery, or incapable of working from scarcity of water, when service is applied for by persons thirled; and the question of the time they are obliged to wait, after such application, before they can be justified in applying to some other mill for service? Whether the privileged miller is liable for the spoiling of grain, in a wet harvest, if not immediately manufactured at a call, and how far the prevention of such risk might justify the giving the employment to other mills? Whether

ther thirled persons are always obliged to turn out, at the call of the miller, to repair dam-dikes, mill-leads, &c. and how far necessary farming operations may not justify them in resisting such a call?

Method of Redress.

Having considered the nature of the grievance, as stated in the preamble, I shall proceed to state the mode of redress provided by the act.

There are three modes in which a thirlage may be constituted; two of them to perpetuity, and one of them temporary. 1st, The perpetual proprietor of one landed estate may have the lands of another perpetual proprietor adstricted to his mill for perpetuity; and one or both of these proprietors may hold their lands upon the restricted tenure of entail. Where either or both estates are held upon entail, it would be incompetent for the proprietors, by private bargain, to make a commutation of the thirlage, which would be valid against the challenge of the succeeding heir of entail. Here, therefore, the interposition of the power of an act of Parliament is indispensable to give validity even to an optional commutation or purchase of the right of thirlage. 2d, The lands of one estate may be adstricted for perpetuity to the mill upon another landed estate, where both proprietors enjoy the full property of their lands unfettered by entail. In this case, it is evidently completely competent to the proprietors, without the smallest need of the special powers of an act of Parliament to that effect, to make a valid bargain, by their own private agreement, either as to the commutation or sale of the thirlage. Here, then, the interposition of an act of Parliament is only necessary to give a power of compulsion to the consenting party, against the party refusing to enter into an agreement. 3d, There is a temporary constitution of thirlage, where the proprietor of an estate adstricts the tenants of his own estate to his own mill, during the currency of their temporary tenure of lease, with the view, it may be, of thus making sure of a proper annual return for his expense in erecting his mill, or, as is supposeable enough, of thus slily catching a rent from his tenants, in a way less apparent to them, and of which they shall not be aware in making offer of rents for their farms. This is by far the most prevailing mode of thirlage. But, for relief under this constitution of thirlage, the act has given no remedy. Parliament, perhaps, in a too liberal mode of construction, has trusted to the good sense of landed proprietors themselves, for the abolition of this preposterous bondage of their tenants, and, mean time, has deemed it disproportionate to interpose their authority, in providing a perpetual remedy for a grievance, which, as common

sense

sense prevails, ought speedily to redress itself: or, probably, it is conceived to be indelicate or inexpedient to interfere in any shape with the free command of private property, either as to use or abuse. Where then a private proprietor so pleases, he may still, notwithstanding of this act, impose upon the tenants who lease his own lands, the bondage of thirlage, to whatever extent, to his own mill; thus compelling them to entrust the custody of their produce to a privileged manufacturer, secure of being employed, whether he gives satisfaction or not, and over whose negligence or dishonesty, in the waste or peculation of their goods, they have no check but legal instruction; nor even upon legal detection, that security for the future, so obvious in other cases,—a dismissal from employment.

This act only applies to the two first cases of the constitution of thirlage. In these, it does not apply to enforce a sale of the privilege. It applies only to enforce a commutation into an equivalent annual payment; and, to prevent inequality through the depreciation of money, the payment is rated in grain.

The form of process for obtaining the benefit of this act, is abundantly simple and unexpensive. Application is made to the Sheriff of the county, whose powers are enlarged for the purpose; and the application is equally competent to either party, whether the proprietor of the servient or dominant tenement. If the mill and the lands adstricted to it lye in different counties, the application must be made to the Sheriff of that county within which the mill is situated; and the Sheriff, after taking in the evidences *hinc inde*, remits the whole to the cognizance of a Jury; in the constitution of which, he chuses twenty-one men of the county, who must all either rent lands to the extent of 30l. of rent at least, or be possessed of landed property valued to the extent of 30l. Scots in the cess-books, of which twenty-one the parties alternately reject one, till the number is reduced to nine; and these nine ascertain the value of the thirlage, and commute it into a perpetual annual payment in grain. The tacksman of the mill is obliged to receive, and the adstricted tenant to pay, this commutation, during the currencies of their respective tacks. The commutation grain is laid upon all the adstricted tenants, in proportion to their rents, unless objected to by tenants paying at least one fourth of the whole rent, when it is remitted to the Jury to apportionate the payment to the best of their judgment. In order to avoid all disputes as to the quality of the commutation grain, the price of it is to be paid in money, according to the fiars for the year. The verdict of the Jury must be registrated within sixty days; and it becomes final in three years from the date of the registration.

This

This mode of redress seems equally simple and unexpensive, as the Scots mode of obtaining division of mixed landed property, which, in England, is a matter of great expense and intricacy. The question then recurs, why has this act never been as yet put in force? This leads me to consider,

The reasons why the benefit of the act is not applied for.

The wind of a cannon ball has been said to prove mortal, even where it did not strike; and one reason suggests itself, which may be thought to evince the advantage of the act, even though it should never in fact be carried into execution in a single instance—'that the grievance, from the conscious power of shaking it off, may *appear*, in imagination, more tolerable to those subjected to it; and that it may *in fact* also, under the same consciousness, be imposed more lightly by those who have the right to impose it.'

Another reason occurs, in the intricate nature of the valuation of a thirlage, which it might puzzle the heads of half the sheriffs of Scotland to unravel, even taking, as assessors, the whole of the good men and true, of 30 pounds of rent, or 30 pounds of valuation. Upon what principle would it be possible for them to ascertain the value of a right, which (according to the circumstances in which the lands over which it extends may be placed, and over the production of which circumstances it possesses no power of controul) may, as already stated, be in any proportion *worth more*, or *worth less*, or *worth nothing?*

Application for a commutation might be made by the proprietor of the mill, whilst the servient's lands were, as yet, in minute subdivision; and would it be fair to entail upon the latter this highest stretch of girst? Or, the servient might apply after his lands were all laid out in permanent pasture;—how proceed in this case?

Another puzzle would necessarily occur in every case, as to the value of the purchase of this said subject, of the most subtle airy tenuity, though the very mention of its name rouses us to ardour—*liberty in the abstract.* A thirty-second part of the produce is, in this county, and, I have reason to believe, throughout Scotland, the ordinary rate of multure, where the employer is not bonded under thirlage. This, therefore, may be considered as the real price of the manufacture of grain: for though it hath been the same for time immemorial, yet, being a grain payment, it hath not suffered depreciation, like rated money payments; and though machinery is, of late, more improved, and more expensive, the superior execution of such improved machinery may well be supposed (as in all other cases) to make its productive operation come cheaper, instead of dearer. Assuming, then, a thirty-

thirty-second part as the real price of manufacturing grain, it is evident, that where the bonded rate of multure of adstricted grain exceeded that of free grain, in a commutation, the value of this excess should be allowed to the whole extent of the adstriction. But after allowing for this excess, ought or ought not any thing more to be allowed for emancipation from the obligation of manufacturing the adstricted quantity, at the remaining ordinary price of manufacture? For instance, we shall suppose that the adstricted quantity of oats, which, by the thirlage, the thirled lands were found by the Jury obliged to subject to the manufacture of the thirled mill, (if, indeed, it were possible for a Jury to ascertain, in any one instance, the extent of any given adstriction), were 128 bolls; then there is no difficulty of ascertaining, that the rate of multure for this adstricted quantity was one sixteenth, or double the ordinary price of manufacture, *i. e.* 8 bolls; it is evident, that, upon a commutation, the proprietor of the thirlage must be found entitled to 4 bolls annually; but, in regard to the other 4 bolls, the usual price of manufacture, is he entitled to the whole of it, in consideration of relinquishing the privilege of the exclusive right of manufacturing the adstricted quantity at that rate? In that case, if it is manufactured elsewhere, it will pay three times the ordinary price of manufacture in possession of liberty, instead of double price that it paid under thirlage. Or, as the cessation of obligation to employ his mill does not imply any prohibition against employing it, shall he receive nothing at all of the said 4 bolls in lieu of quitting the exclusive privilege of manufacturing the 128 bolls at that rate? In that case, (rates of manufacture being the same), the exclusive right of manufacturing is worth nothing, nor is liberty of choice of manufacturer worth any purchase money. Or, is liberty of choice of manufacturer an unalienable privilege, that could never have been, but injuriously, taken away; and which therefore ought to be restored without compensation?

I apprehend these puzzling difficulties, both as to the ascertaining the extent of grain to which the thirlage reaches, (either taking the thirled lands in their presently existing circumstances, which might obviously be injurious to the one or the other of the parties, or averaging the medium of their existing, past, and supposable future circumstances, which would be extremely difficult), and as to the inexplicable value of liberty in the abstract, must have rendered, and will continue to render, proprietors extremely shy in committing their respective rights to the opinion of a Jury, which must float in the *mare magnum* of darkness and uncertainty,

uncertainty, without star or compass of any fixed principle to direct it. In the words of Hamlet,

——————'*there's the respect*
That makes calamity of so long life,
And makes us rather bear those ills we suffer,
Than fly to others that we know not of.'

Unless fixed principles shall be laid down in the act itself, by which Juries are to regulate their determination, I am disposed to think that any act that shall be passed upon this subject, will ever prove, as this has proved, nugatory.

Upon the reform of any practices that are oppressive, those that are deprived of the benefit of the oppression must submit; nor does it appear necessary, in many instances of this sort, that any compensation should be made for the relinquishment of the right to oppress. Perhaps, in this view, mere liberty should pay no purchase. F.

NOTE BY THE CONDUCTOR.

It is unnecessary to add a single word to what our able and ingenious correspondent has stated upon the thirlage act, except to notice his error, in supposing that it has not been carried into execution in a single county in Scotland; the contrary of which may be seen, by consulting our Supplementary Number for December 1803, where two instances which occurred in Ross-shire are noticed. We perfectly agree with him respecting the inefficacy of the act to accomplish its *avowed* purpose, though we are equally clear that it has *indirectly* accomplished a great deal of good to the country. On the estate where we reside, thirlage has been voluntarily commuted into a money payment, in consequence of an agreement betwixt the whole tenants and the millmaster; and we have cause to know that the like plan has been adopted in numberless other instances. Thirlage is a remnant of feudal servitude, which, like tythes, ought to be universally abolished. In the rude stages of society, both were probably expedient and necessary, because the want of a circulating medium rendered payments in kind absolutely indispensable; but under existing circumstances, where society is enlightened, and the principles of trade understood, these ancient practices should be abrogated entirely, and the very words, which conveyed ideas of their meaning and import, buried in oblivion, as useless to mankind, and disrespectful to our ancestors.

To shew our worthy correspondent what may be the sentiments of others on this important subject, we present two papers which have remained a considerable time with us. Were the opinion of the first acted upon, there would be no doubt concerning the

inutility of the thirlage act, and the extent of the benefit which those who applied for relief would ultimately gain; and as to the other, it shews the abominable grievance of thirlage in the abstract, seeing that, according to its rules, a mill-master thought himself justified in claiming dry multures on a grain which he could not manufacture. We think the public at large were obliged to the last correspondent, for opposing such an arbitrary attempt to increase a grievance already severe enough; and cheerfully insert his statement, because we are satisfied it may be beneficial to farmers in other counties, where liberty and property are less protected, or, in other words, where the rights and privileges of mankind are less understood and comprehended.

N.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On the Thirlage Act.

SIR,

IN your Supplement of 21ſt December 1803, a correſpondent ſeems to think, that a Jury, in eſtimating the value of thirlage, under the late act, erred in giving the full value of all multures, ſervices and dues, without making the leaſt deduction whatever, in conſequence of the mill being relieved of the actual labour of manufacturing the grain, for which theſe multures and dues were claimed; as, by doing ſo, it is ſaid they gave more than a juſt equivalent.

This is a miſtake, unleſs the whole multures thirled had been purchaſed up at that time.

The millers, or other mill-ſervants, are paid in meal from the tenements thirled. Suppoſe the half, or any leſſer part of the multures are purchaſed up, the conſequence is, a diminution of the wages of the millers. This muſt be made up to them by the mill-maſter; of courſe, he gained nothing by the tranſaction, after being paid for the miller's fees of manufacturing.

This act is calculated for the benefit of the ſubjects thirled; and, in all partial purchaſes, the owner of the mill muſt be a loſer: he therefore falls in juſtice to be fully indemnified; and in this view of the ſubject the Jury did right.

A. B.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On Thirlage.

SIR,

THE following caſe, which ended in my favour, may perhaps be of ſome uſe to agriculturiſts placed under the like circumſtances;

ſtances; therefore, it will be agreeable to ſee an account of it inſerted in your Magazine.

Several years ago, I was threatened with a proſecution by the mill-maſter of our barony, for abſtracted multures, on account of wheat bread conſumed in the family, and during the period of harveſt, by ſhearers employed to cut down the crop. As his claims extended to the conſumption of many years, and amounted to a large ſum, I thought it prudent to take the opinion of Counſel thereupon. This I did by the following memorial.

" The memorialiſt poſſeſſes the farm of ———, under a leaſe, which ſubjects him to carry *all* the *grindable corns* uſed by him and his ſervants to ——— mill, there to be manufactured, and to pay thirlage for the ſame, agreeable to the eſtabliſhed rules and cuſtoms of the barony. The mill there erected is only capable of grinding oats, barley, and peas, into meal, but not, in the moſt diſtant degree, calculated for grinding wheat into flour. Of courſe, the memorialiſt has only carried the three firſt mentioned grains there, and has got the wheat neceſſary for the uſe of his family and ſervants, manufactured at another mill ſufficiently qualified for that purpoſe. This till lately has not been queſtioned; but he has now received intimation, that if he does not inſtantly account for abſtracted multures on the wheat manufactured by him, and alſo for bread purchaſed, that a proceſs will be raiſed before the Judge Ordinary on theſe accounts. The learned Counſel's opinion is therefore requeſted on the following points.

1. Is the memorialiſt liable for abſtracted multures on wheat, ſeeing that the mill to which he is thirled is incapable of manufacturing that grain into flour?

2. Is he at liberty to purchaſe wheat bread for the ordinary uſe of his family, and the ſupport of his ſhearers in harveſt, the mill-maſter having threatened him with a proceſs on account of ſuch purchaſes?

3. Has a mill-maſter the right of detaining what is called *duſt*, ariſing from oats manufactured at his mill?

ANSWER.

The preceding queries are diſtinctly ſtated, and I ſhall anſwer them in their order.

1*mo*, I anſwer, that although the clauſe in the leaſe referred to is very broad, I am of opinion, that the memorialiſt is not obliged to grind his wheat at a *corn-mill*, nor to pay dry multures, unleſs the univerſal practice of the barony on which he reſides ſanctions ſuch a meaſure. Practice explains and regulates every queſtion reſpecting the import of a clauſe of thirlage.

2*do*, I am decidedly of opinion, that the memorialiſt may buy

wheat bread for his family and ſhearers, without being liable in dry multure, if the practice of the barony does not lye the other way.

3*tio*, The queſtion reſpecting *duſt* will depend entirely upon the practice eſtabliſhed at the mill. If the miller has been in the uſe of keeping it, he will continue to do ſo. If otherwiſe, he has no ſuch right."

Fortified with the above opinion, I immediately waited on the law agent of the mill-maſter, and having told him the ſubſtance thereof, he requeſted me to call on a future day. Accordingly, when I called, his anſwer was, that he had now looked at his *law books*, and was ſatisfied that I was in the right. To which I replied, that it was a pity he had not done ſo at an earlier period, as the delay had occaſioned me to lay out a couple of guineas, which would have been as well in my pocket as in that of the lawyer whom I had conſulted. There the matter ended, and I never heard more of it. Yours, &c. A FARMER.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

SIR,

IF the following inquiry, respectfully addressed to the Patriotic President of the Board of Agriculture, should be deemed deserving of a place in your Magazine, you may insert it when convenient.

The thoughts are not altogether common; nor do they seem in unison with the general sentiments of the times; but if they lead to an useful discussion of the subject where controvertible, it may perhaps have some tendency to promote the general good of your readers. They were originally designed to be addressed to Sir John Sinclair in a separate letter; but, by means of a hint from himself, they are offered as an Essay for the Magazine. I am, Sir, your most humble servant,

GORDIUS.

Edinburgh, 1*st October* 1806.

Inquiry into the Nature and Fluctuation of Corn-Markets; the Causes of that Fluctuation, and the probable Consequences thereof. Respectfully addressed to Sir John Sinclair, Baronet, President of the Board of Agriculture.

OF all the various commodities which have become articles of trade, there is not one of more importance to society than grain. Every individual is deeply interested therein; hence it becomes

becomes the important concern of all. In nearly the rudest and most barbarous state of civilization, the production of corn has been a primary object, and the demand has constantly increased with society itself: bread is the staff of life. How much soever a country may abound in every other article of food, the want of bread alone is considered to constitute a famine.

With regard to corn as an article of trade, it is the most universal, as well as the most indispensable. The inhabitants of every clime, whether more or less fertile, find occasion for it; and where little or none is raised, the most delicious fruits, and every article of use or luxury in society, are most readily exchanged for it. When barter was the only mode of traffic, no artist could so readily procure the articles of his neighbour's industry as the propagator of corn, none being in such universal demand, or of such urgent necessity. In the progress of society, when the precious metals were coined, and made to represent *real wealth*, no article either of utility or convenience, could more readily command them than corn; and hence it naturally became an important branch of commerce.

But so strangely has that article been, in all ages, subject to fluctuation and uncertainty, that not only many of the commercial dealers in, but the actual propagators of it, have been reduced to bankruptcy. Certain as the demand for it must always be, it is equally uncertain if the returns will be sufficient to replace the capital of either with a profit. Adventurers may go too far upon their speculative ideas; and if the latter takes land, and the former purchases the produce too dear, the consequence must be loss. It would seem that uncertainty (or fluctuation) belongs *peculiarly* to the corn trade; for, though all human affairs are subject to change, there is one feature more particularly belongs to it. It now and then presents what the dealers call *fit opportunities for speculation.* When these opportunities present themselves, they are embraced with avidity, in proportion to the chance of being soon over. The capital employed is generally great, especially when the fascinating prospect of uncommon profit allures the adventurer. The die is cast; but the issue is often upon the opposite side of his hopes; the profit or loss are generally very conspicuous. Hence those immense overgrown fortunes, which are extremely rare; hence also those ruinous failures, which are but too frequent. That the prices of grain must still be subject to great changes, no one can possibly doubt; for when we consider the fluctuation to which they have hitherto been liable in time past, we must certainly be forced to admit, that they are still subject to such va-

riations. Similar causes will uniformly produce similar effects. Plenty will infallibly bring down the prices, and scarcity raise them. The operation of these causes will be found so inflexible, as to manifest themselves under every circumstance, and yield to no kind of opposition. If the rent of land, and the wages of labour, could influence the prices of grain, then certainly markets would *never be low*. If they were regulated by these circumstances, they would at least maintain their uniformity with little variation. As it is manifestly the interest of the landholder that rents should always be high, and of the labourer that the price of labour should never be low, every successful attempt to keep up these, would infallibly keep up the price of grain; but that no such consequence does naturally follow, must be evident to every thinking person. If the axiom is admitted, that 'plenty will reduce the price of corn, and scarcity raise it,' (and it is a maxim common to all trades), then it should not certainly be difficult to conceive very important changes in future prices. They have of late been much higher than the boldest speculator could have ever thought of. Is it impossible to conceive a series of crops as much above a medium crop as crop 1799 and 1800 were below it, and consequently a reduction of prices? This is by no means a fashionable doctrine; for when wheat was in these years above 60s. per boll, or above 114s. per quarter, many seemed to act as if they had a security for its continuance. Some respectable men declared they thought it would seldom or never be under 60s. What will such men now say, when they consider the effect of only three crops, 1801, 2, and 3, immediately after a famine, and the wheat of these crops avowedly not the most plentiful supply? Crop 1803 having been more prolific, occasioned a farther reduction of prices. The prices of crop 1804, indeed, must be allowed to have been excessive, considering the plenty it brought to *Scotland* in particular; but these were occasioned by a famine in Spain, and a considerable failure of the crop in England. These affected the general supply, and acted upon the general market, in exact conformity to our leading axiom. The fiars of East Lothian for that crop were, Wheat, 46s. 1¼d.; Barley, 33s. 3¼d.; Oats, 21s. 8¼d.; Peas, 19s. 2¼d.

Surely were peace established throughout the world, on a solid and lasting basis; were the commercial intercourse opened between every neighbouring kingdom and state; were 'the sword turned into the plough-share, and the spear into the pruning-hook,' then the arts of peace would infallibly succeed. Agriculture is now the darling object of every wise state, and receives the

the countenance and encouragement of every patriot, and of every respectable society. The excessive desire of employing capital in this way, has induced many to withdraw it from other branches; the countenance it has received from the higher orders of society, has rendered it respectable; and great capitals are yearly adding for the support of its interests. The scheme of cultivating immense regions of waste commons, will no doubt generally succeed in this island; and waste, uncultivated tracts on the Continent, will be under the culture of the plough, which at present are covered with hostile armies. Under this impression, can we allow ourselves to think that corn will not become universally plentiful, and consequently cheap?

It is not uncommon to hear farmers say, that the Legislature being so much interested in the prices, for supporting the value of their lands, will take care to secure such in close connexion as will enable their tenants to pay their rents. But we have a commercial as well as a landed interest in that body, who will, no doubt, for the interest of trade and manufactures, endeavour so to temper and qualify the corn laws, that no injury can be thereby sustained from them. Let us suppose, for a moment, the landed should prevail over the mercantile interest, what must be the result? Certainly destruction to trade and manufactures, and, finally, ruin to the country! Our manufactures could not be carried on where provisions are dear, to the same advantage as where they are cheap. In our competition with other nations who possess such advantages, we would be cut out of every foreign market.

It is true, many of our weavers might continue with us, perhaps even the best and youngest among them, if the Emperor of the French persists in that policy, as to the admission of strangers to the rights of denizens, which was one law made during the short peace. But, alas! they would only appear as ghastly monuments of our former prosperity. Our trade might languish, nay, totally decay, while these men, in the last stage of poverty and wretchedness, might repeat their tale of woe, shivering over the embers of their old looms! New manufacturers, and new looms, would start into existence in more favoured lands, perhaps even in the country of our greatest foe. BONAPARTE would relinquish the above laws for the encouragement of useful hands, and would likely be too wise not to take every advantage of our misconduct, which the circumstances of the times would point out to him. Of this, however, we have too much ground of confidence in our British Senate, to allow one moment's apprehension.

It is said, as another argument to prevent the Scotch farmer from fearing any decline of prices, that Scotland does not pro-

duce as much grain as is necessary to maintain its inhabitants. This may be said *gravely*, because it is true; but it is a poor argument, as long as *Britain* can support itself. Our corn is an article of commerce which has often kept other nations from starving, while our manufactures are celebrated over all the world.

Upon this head, however, it must be admitted, that more corn has been imported from 1767 to 1801 inclusive, a period of 35 years, than exported, by at least one whole year's supply. But the causes of this are well known. The many unproductive crops in that period is a principal cause. We had no less than six bad crops, nineteen rather deficient, and only ten good ones. In that period, too, it is estimated that an addition of one fifth part of the population took place, which was capable of consuming far more than our former exportation. The mode of consuming our product; the increased luxury of the nation, must also be taken into the account; and no wonder that the trade is now turned against us. But these need not be causes of alarm to the nation, or of triumph to the speculator in land, as there is no doubt of this country possessing more fertile or improveable land than would supply twice her present population. None who know the state of agriculture through many of the most fertile and improveable counties in England, will deny this. What an astonishing addition would the proper cultivation of the country make, when all the productive ground is brought into action!

Here it must be observed, that if the tythes should ever by any means, whether by the authority of the Legislature, or by the mutual consent of parties, be commuted into money, that improvement would follow as a necessary consequence; these, at present, being an effectual bar to improvement.

By means of such rapid improvement in agriculture, as is at present going on in Scotland, and will in that case take place also in England, there can be no doubt of our being able to meet the increasing consumpt, from any addition which can be supposed to take place in the population. This is a pleasing contemplation; that while the means of our security against any attempt of our restless enemy is increasing, the means of supporting the additional inhabitants is also increasing; and we have every reason to believe, that more productive seasons will be sufficient means of keeping the prices *moderate at least*. Indeed there seems no reason to doubt of this circumstance being sufficient to make them occasionally *very low*. For if it is admitted, that the country is able, by an improved agriculture, to maintain double its present population, that must follow as a natural consequence.

It

It must however be observed, that by means of our very extensive commerce, we have no reason to fear such great inequalities in the prices as have often taken place formerly; though it is a safe maxim, that plenty will reduce the price, and scarcity raise it.

What occasioned the uncommon rise of grain in 1799 and 1800, and what the subsequent decline of prices in 1803? The first was created by a real and most lamentable scarcity for two successive years, and the last by two good crops. These causes operated upon the corn market, in the most universal sense. The whole globe has experienced it more or less in both cases. They have operated according to our axiom, too, which will always be found infallible; and there is not a doubt, that a short series of such crops would astonish speculators, who seem fond of deceiving themselves, and being lulled into an useless security. Wheat of crop 1803 was almost the only grain which may be said to equal the high rents, and it is not to be wondered at that it did so, because it was not in general the most productive crop; that article being also now consumed in the meanest cottage, as well as in the most stately palace.

It may not perhaps be easy to account for such violent fluctuations in the price of corn, as has been said above to affect so materially the condition even of the opulent adventurer. But as every effect must have its cause, I shall here endeavour to ascertain the cause or causes of such fluctuations.

When the ordinary supply of the country in general is at any time increased, the price will of course fall, and if diminished, the contrary. But if circumstances occur to increase the consumption of grain, this will evidently operate in the same manner as a short supply of that commodity; and if to diminish that consumpt, in the same manner as an increase of it.

An insular situation, like Britain, would be affected by emigration, though emigration cannot affect the general market of the globe. False speculation—ideal plenty or scarcity, will for a time operate in the same way as if they were real; and perhaps it is owing to this, as much as any thing, the sudden and violent fluctuation of prices. If men are not perfectly just in their ideas of things, it is impossible their actions can be correct. They must act according to their opinions, however false and erroneous they may be. If they purchase largely of a crop apprehended to be scarce, while in fact it is not, they are using the ordinary means of providing against a scarcity toward the close of the year, while no such scarcity can happen. By these means, their avidity to purchase will naturally raise the prices, and their provident care of the future will as naturally reduce them, by augmenting

menting the quantity toward the time of the supposed scarcity. On the other hand, should the idea of plenty generally prevail while it is otherwise, the merchant may be induced to open his stores, though markets are not yet able to replace his capital with a fair profit—perhaps may subject him to great loss. These may be called the summer speculations, which are founded on the appearance of the green crop in the straw. But though this appearance is often extremely fallacious, the speculator is not beyond the reach of deception, even when it is ripe. The crops will often yield much beyond the idea of the most experienced farmer. Crop 1803 may be considered of this sort, which is the most rare; though at other times a crop may fall as much short of its appearance, without being any way affected by harvest weather.

We have not for many years, till the present, (1806) been either interrupted or alarmed by bad harvest weather, which has always an effect on the prices. It has, however, nearly terminated, at an early period, with little interruption. But the lightness of the Scotch crop, and the general bad account of the English and foreign wheat already operate.

Other causes, too, affect the prices of grain. If the sphere of agricultural pursuits is enlarged, a greater quantity of corn will thereby be thrown into the market, as has been hinted. The decrease of specie, or (which is the same thing) the augmentation of its value will tend to *lower*, and the increase of it to *raise* the nominal or money value of corn. At present, money has undoubtedly suffered a considerable diminution in its value; whether from the increase of the precious metals by means of a more productive state of the mines, or the more extensive encouragement of paper currency is not material to inquire. This must operate powerfully in keeping up the nominal value of corn; but it can only be in proportion to that alteration. For, if at present any certain price is assumed as that which corresponds to 20s. during the latter part of last century, say 25s., then in place of finding the wheat falling to 15s., as it did in crop 1778, it would only fall to 18s. 9d., and in place of falling to 18s., it would now fall to 22s. 6d., &c. But it is difficult, perhaps impossible, for any kind of arithmetic to ascertain what is the real alteration of the value of money. One thing, however, is certain; if the annual produce of the country is by any means increased beyond its usual extent, the above proportion will not hold, but fall below it. With regard to the causes which have been assigned for the fluctuations of corn markets, it is evident, that if any two of them which are similar in their effects happen to combine, their operation becomes violent; of this we have an instance in crops 1799 and 1800. At that period, the value

value of money was understood to be considerably decreased, and the general produce of the globe was so much diminished, that little short of a famine ensued. In consequence of these circumstances, wheat rose in Haddington at the highest pitch, to 76s. and 78s. per boll, or 153s. per quarter. In the London market they were still higher, even as high as 160s. per quarter. When two causes which have a contrary tendency to each other happen to unite, for example, a scanty crop at a period when money is high in value, they will tend to counteract each other. When equal and contrary powers oppose each other, they are said (in the science of mechanics, to destroy one another's effects, and that is so here too in proportion to the opposition. The slow degrees by which money either increases or diminishes in value, can never keep pace with the more sudden and irregular changes of corn markets; but when the scarcity raises the price of grain, the opposing power, viz. the high value of money, acts in a certain degree as a check upon it. Of this we have an instance in crop 1740. That crop had almost produced a famine in Britain; and had not the means of purchasing the corn been much circumscribed, in comparison of the present times, it would have been *nominally* much higher than in the two last dear years. The fiars of that crop were, Wheat 22s. 6d.; Barley 18s. 6d.; Oats 15s.; and Peas 22s.; but in summer 1741, much higher—the meal 2s. 6d. per peck of eight lib. Dutch. The prices of our late dear years are within the memory of every one. Oat-meal was as high, in the Edinburgh market, as 4s. 8d. per peck retail! Barley, in spring 1801, was 60s.; Oats 46s., and Peas 42s.

War also affects the prices of grain. Perhaps never was there a more evident instance of this, than the consequences flowing from the recent transactions of the Prussian monarch. He adopted a system of the most cautious—perhaps the most criminal policy which can be imagined, (of which he seems now ashamed). When an alliance was formed with the Russian and Austrian governments, for the security of the interests of Europe; when the wavering balance needed but *his* influence to turn the scale to either side; when the evidence of Bonaparte's views for his own aggrandizement and the subjugation of every other state within his reach was so extremely apparent, he acted the part of the most timid neutrality, and then formed a league with the usurper to interrupt the trade of Britain, by shutting the Elbe, the Weser, the Ems, and all the rivers of Germany over which he had any controul, and, by the by, as the first fruits of the new acquired freedom to his people, he also *shut their mouths*; so that, by a public edict, they dare not talk upon political subjects. The impresssion which this policy made upon the Scotch

Scotch market was instantaneous and violent. Wheat, which had been pretty steady, and for many months had not exceeded from 32s. to 35s. 6d., (which last was the top price in Haddington the week before the news), rose suddenly to 42s. 44s. and 46s., and continued to rise while the same cause continued to operate. It is rather out of my province to take notice of the effect which such timid, such dishonourable, such wretched policy may have upon this despicable monarch; but it may not perhaps be thought too much to say, that this late act was forging his own chains, and that his independence is entirely at an end.

When the whole civilized world is engaged in the business of agriculture, their exertions must naturally tend to reduce the price of corn; and when it is found that the extra quantity produced by the superior skill and art of the farmer, is not sufficient indemnity for the want of price, the only alternative left is, to graze such proportion of his land as will again turn the balance in favour of corn, or maintain a just equilibrium between them. The astonishing increase of the price of butcher meat, renders this a most eligible expedient; and the joint effect of individual exertion will have a powerful influence in correcting a tendency to either side.

The same causes which affect the price of grain operate on every commodity. Plenty or scarcity will always regulate the price; the value of money, too, will affect the prices of every article of trade; and, in general, whatever can be said of the corn-market, may be applied to that of any thing else.

Every manufactured commodity must fall in price, in spite of the value of the raw materials of which it is composed, when a strong competition takes place among manufacturers. Even the value of labour will fall, when plenty of candidates present themselves for every employment, and that in spite of the price of provisions. The prices of grain, as already said, will rise or fall, without any regard to the rent of land. This last must be a serious remark to the occupier of land; but it is certainly founded in truth.

We have authentic tables of our East Lothian and Mid-Lothian fiars *, from 1627 to 1779, in which much is to be learned as to the mutability of corn markets. One, not accustomed to such investigation, would be surprised to find, that in East Lothian, wheats, during crops 1628, 1629, and 1630, were not under 20s., and in 1631, 25s.; in 1634, 11s. 8d.; next year, 25s.; in 1666, 8s.

* Fiars signify the medium price of the crop mentioned, and are generally determined early in March.

8s. 4d.; in 1667, 8s. $7\frac{4}{12}$d.; in the four last years of the seventeenth century, 21s. 8d., 20s., 26s. 8d., 25s., (these were denominated the *dear years*); in 1706, 8s. 4d.; and, after a series of low prices in 1743, 9s. 8d.; and finally, in 1778, 17s. $9\frac{1}{2}$d., and in 1779, 15s. $0\frac{1}{2}$d. It is curious to remark, too, that the highest average of any period of twenty-one years, from 1627 to 1776, 150 years, does not exceed 18s. $9\frac{4}{12}$d., which average falls in the last period; but the average of the first period, viz. from 1628 to 1650, is 18s. $0\frac{9}{12}$d.; the rest are very low, generally under 14s., excepting one period, (the middle one), which is 15s. 8d.

Such great and often sudden alterations of prices, would seem sufficient to damp the ardour of speculation, and produce a spirit of caution but ill suited to an adventurous age. Sorry indeed would I be to employ my pen, in encouraging such apprehensions, as might in some measure paralyze the strong arm of trade and agriculture; but when one observes a kind of *mania* prevailing among speculators of every kind, it forces a few reflections and observations, which seem obviously deducible from sound experience. That plenty will at this day operate a reduction of price, as well as it did many hundred years ago, is assumed as an axiom; and similar causes will always produce similar effects. The grain of crop 1794, especially the wheat, had been too hastily consumed for the general scarcity; and on account of the situation of most, if not all the surrounding nations, by means of the French *revolution-war*, the quantity in this island fell short of the demand. In the summer 1795, accordingly, we find that wheat rose rapidly from 33s. to 68s., even to 70s. at Leith (the fiars of that crop only 25s. 6d.) Towards the approaching harvest, it suffered several sudden and very material changes, falling and rising alternately, no doubt, according to the ideas and consequent operations of speculators. The fiars of wheat, crop 1795, were 46s. 9d.; of crop 1796, 27s. $2\frac{1}{2}$d., and fell as low as 21s. the ensuing summer. Oats of crop 1796 fell as low as 10s. 6d. through winter; and the average till March 1797, (or the fiars), was only 16s. $1\frac{1}{2}$d. The crops 1802 and 1803, in general, were abundant; and, notwithstanding the extreme scarcity, during the consumption of the two preceding crops, which occasioned a very uncommon demand upon the first cut grain of crops 1801 and 1802, prices gradually declined to such rates as may be considered were hardly able to support the high rents of land. Crop 1804, from extraneous causes, rose very high.

Thus, after the highest prices ever witnessed, or ever recorded, they have fallen, recovered, and comparatively fallen again.

Speculation

Speculation was much blunted; and a spirit of caution seems to have prevailed, among the *corn merchants at least*, in 1803.

It was long the common language of farmers, that *land is at its height*. However, that phrase was dropt, and succeeded by one much more cautious before the end of last (eighteenth) century. 'Things must certainly come to a crisis.' This phrase, croakers may use with safety; for all human affairs have their crisis. Kingdoms and states, trade, manufactures, arts and sciences, all have their zenith, all have their fall! And have we not some reason to apprehend that such a crisis may happen, under such circumstances as we have seen markets liable to? We must allow that, keeping the population of the country *out of sight*, there can be no doubt the increased agricultural produce would soon exceed the consumpt, and overstock the present inhabitants; and, no doubt, population having *at least kept pace* with the means of supplying their daily wants, has been the cause of the prosperity both of trade and agriculture.

It lies rather out of my province to advert to the effect of war upon our population, either within this island, or on the globe at large. But it is a striking circumstance, that the war with France and Spain, which terminated with the peace of Paris in 1763, employed annually no less than 200,000 English, besides Scotch and Irish, by sea and land, and in its progress carried off nearly that number. Such a depopulation must always be severely felt. But, in ordinary wars, a breathing time has been expected. A peace has succeeded; and time, the great healer of the most irksome wounds, has furnished balm to *heal the afflicted nations*, and opportunity of recruiting their wasted population. Should the present hostile attitude, however, of our implacable enemy—the scourge of the human race—be, in the providence of Almighty God, permitted to continue so long as many apprehend; and should actual invasion take place, or even be frequently attempted, it seems to baffle argument to discover what may be the final result. Whether it might most affect agriculture or population, is difficult to determine. But one thing is certain: the extensive scene of agricultural pursuits which was above contemplated from the idea of peace, must vanish into smoke; and that general plenty, which the spirit of farming, as a principal art of peace, was to introduce, for the time be given up. Should the war become general and bloody, population would suffer in like proportion, and thereby perhaps the present balance of food and population be maintained. The late unhappy, disastrous events upon the Continent; the death of our most successful admiral, Nelson, the terror of our foes; together with that of our able and patriotic statesman, Mr Pitt, and that very exalted

exalted character Lord Cornwallis: had these not been counterbalanced by our extraordinary superiority at sea, evinced in that most brilliant action off Trafalgar under Lords Nelson and Collingwood, that under Sir Richard Strachan, and the more recent one under Sir John Duckworth in the West Indies; we would have been forced to dread that they portended no less than the downfal of Great Britain, and that Bonaparte was destined to be our scourge, and the executioner of Divine vengeance. How long this vengeance may be delayed, or how soon it may be executed, and who may be the Nebuchadnezzar of our times, belongs not to the present inquiry, and must remain a secret till its very accomplishment. But had these successes not taken place, perhaps we should have soon witnessed the peaceful shores of Britain stained with *hostile* blood, in place of a warfare merely of menace.

As to the nature of population, and the means of supporting it, Dr Paley quotes from some treatise on that subject (see his Natural Theology, 10th edition, 1805, p. 548.) thus. 'The order of generation proceeds by something like a geometrial progression; the increase of provisions, even under circumstances the most advantageous, can only assume the form of an arithmetic series. Whence it follows, that the population will always overtake the provision; pass beyond the line of plenty; and will continue to increase, till checked by the difficulty of procuring subsistence.' He adds, 'Such difficulty, therefore, along with its attendant circumstances (poverty) must be found in every old country.'

Were this definition correct, it would most effectually subvert the preceding doctrine, and leave no chance of any thing, but the most rapid advance of prices, and the most gloomy prospect of penury beyond all remedy! A penury which would soon affect the opulent themselves. It may not therefore appear an unreasonable digression, to endeavour to expose the fallacy of this assertion.

All who are acquainted with the nature of these different progressions of numbers, will soon perceive that the comparison is erroneous. The former is a set of numbers, increasing or decreasing by multiplication or division; and the latter, one which is increased or diminished by the slower operation of addition or subtraction. And that number by which such operation is performed, is called the common ratio of the series.

If we suppose two people (one pair, the least we can suppose) the first term of a geometrical series, to increase yearly by 2 (for none lower is effective) in a geometrical progression, the series will stand thus:

$2^1 : 4^2 : 8^3 : 16^4 : 32^5 : 64^6 : \&c. \ldots 262144^{17}$
$\ldots 536870912^{28} : 1073741824^{29}$.

The

The inhabitants of the globe were, in 1798, estimated, from the best authority, about 953000000; but the above series makes an increase much above that in 27 years. What provision can be sufficient to keep pace with such an amazing, such a rapid increase!

Let us suppose this pair to possess very ample means of procuring subsistence, and of providing, by common industry, for their posterity. Let them have 500l., which is surely great allowance. This 500l. is the first term in an arithmetic series, which suppose to increase by the very great common ratio of 1000l. yearly. The series would stand thus:

$$\text{L. } 500^1 : 1500^2 : 2500^3 : \text{— L. } 26500^{27}.$$

But compare them.

Population, $2^1 : 4^2 : 8^3 : 16^4$ —— 1073741824^{27}.

Provision, $500^1 : 1500^2 : 2500^3$ —— 26500^{27}.

Thus it appears, that however *like* the population and provision may seem to be to such progressions of numbers, it seems to have been wholly ideal in the author who makes the comparison; and Dr Paley, who is a great author and good character, has been misled by his specious reasoning. For by this theory the population in 27 years is TEN HUNDRED SEVENTY-THREE MILLIONS SEVEN HUNDRED FORTY-ONE THOUSAND EIGHT HUNDRED AND TWENTY-FOUR inhabitants. And their provision TWENTY-SIX THOUSAND FIVE HUNDRED POUNDS!!

In the thirteenth year, the population has fairly 'passed beyond the line of plenty;' for the inhabitants at that period have not twenty shillings a piece. And from that they pass into extreme penury, with a swiftness accelerated beyond all conception.

But perhaps the writer of this Essay adheres to his opinion, and conceives, that, in some division of unity, a first term may be found, and also a common ratio, which might prevent the population from overtaking the provision for many a century. But, alas! besides the absurdity of assuming any decimal part of *a man and a woman* as the first term of the series, if the common ratio is any thing under two, it can never increase; because, to multiply by one is doing nothing, and to multiply by a fraction is diminishing the sum we intend to increase.

However specious the idea may be, it is certainly inadmissible. For, how vastly must we exceed all the bounds of common sense in portioning the first pair, in order to ward off the fatal approach of poverty for any considerable length of time! But to endeavour to conform to his ideas, let us assume a first term, so low in the scale of fractions as .00001, to represent *the population*. The least effective common ratio we can admit is 2, which, in

17 operations in a geometrical series, will be found to produce 1.31062. This sum, just emerging above unity, will increase so rapidly as soon to overtake any arithmetical series, however great its first term may be. Thus a geometrical series, whose first term is 1.31, will, in 17 years, amount to 191704;

$$1.31 : 2.62^{1} : 5.24^{3} : 10.48^{3} : \text{—} \; 95852^{16} : 191704^{17}.$$

Here we have, upon this idea, a population increasing for 34 years, one half on the scale of fractions, the other upon that of integers, which in that time amount to ONE HUNDRED NINETY-ONE THOUSAND SEVEN HUNDRED AND FOUR; and if we suppose the portion of the first term TWO POUNDS (a great sum for the *hundred thousandth part* of human being), and that it is to accumulate at the rate of one thousand a year, then we have, in the 34th year of the series, to set off against the above population, only ONE THOUSAND AND SIXTY-EIGHT pounds, which is little more than FIVE FARTHINGS a piece!

It is impossible to give an example of any country or district, as to its population and the means of supporting it, in order to try the assertion by the actual circumstances of that country. The many adventitious instances of foreign population; those of emigration; and perhaps a variety of local circumstances, must wholly prevent this. But it may afford a clearer view of the business, if we take in the whole field of population, since the creation of mother Eve. If we call the first pair the first term of a geometrical series, the last term will be our present population, which, in round numbers, call ten hundred millions. Thus, $2^{1st.} : \text{———} \; 1000000000 : {}^{5810}$ during 5810 years, and $\frac{1000000000}{2} = 500000000^{5809}$; and the exponent of 500000000 is 5809, or equal to the number of terms minus unity. So that the root of this power, or of 500000000, the 5809th root, is the common ratio. Thus, log. of 500000000 $\text{—} \frac{8.698970}{5809} = .0015$, which is the logarithm of the ratio, or the fifteen thousandth part of unity! But this cannot increase the series by multiplication, and shows that the idea is unfounded.

The chain, no doubt, (or the series), was broken at the deluge, both as to population and provision; but it is evident that, in the present situation of the world at large, the provision has rather *passed beyond the line of* POVERTY, and seems in a fair way of going on still, until perhaps checked by those violent revolutions which threaten universal destruction, as well as anarchy.

From this investigation, we must certainly be compelled to acknowledge, that the method by which Providence preserves

the balance between population and provision, lies beyond the reach of arithmetic. The preservation of the balance between the sexes, too, is another mystery; but, indeed, we are surrounded with mysteries, and are puzzled at all hands. We ought therefore to be satisfied that all things are well ordered and proportioned, although we cannot effectually explore them.

Dr Paley, in endeavouring to account for the natural evils permitted by a beneficent Being, quotes the author already alluded to, and from that draws the conclusion, that labour, servitude and restraint, are the natural and unavoidable sequences which must always result from such a state of society as that in which we are placed in the world; but he is far from regarding them as *real evils*, and beautifully moralizes upon that inexhaustible fund of felicity which can be appropriated by every member of the community.

Having thus considered the nature and fluctuations of corn-markets, and glanced at a few of the most apparent causes of such fluctuation, it remains to make a few observations on the probable consequences.

From what has been said of the causes of the fluctuation of corn-markets, and the evidence adduced of their various and sudden changes, it will be no difficult matter to discover, what may be the probable consequences of such changes in future.

The consequences must assuredly be, that some merchants will make fortunes, as they have done in all time past; but the chances will be similar to those in the lottery, where there are a great number of blanks to a prize. Many will be bankrupt, and readily acknowledge the fascinating influence of the *corn trade*. Some farmers, too, who are able to suffer a few *years perhaps* of low prices, both of corn and cattle, will continue to *figure in their line*; but those who adventure on new leases with little stock, will fall victims to their own temerity.

"No venture, no gain,"

is an old maxim; and those merchants who have an insatiable ambition for gain, will drive this to the utmost. The danger of getting beyond their depth, and calling in the aid of those, who have only a moderate competency, to their ruin, is to them a matter of mere indifference. And, alas! many are the innocent dupes of such avaricious adventurers. Often do these *dashing speculators* wring with anguish the heart of a father; extract the glistening tear from the eyes of the mother, and force from the innocent throats of a young family, the unavailing cry of hunger! But ambition must have its course, though virtue and innocence should both suffer. Farmers, indeed, are the least ready to suffer from speculators, because they may sell all their grain

grain for ready money, though the prices in that case should be somewhat less than those can obtain who give credit upon bills. This indulgence to a merchant, will no doubt procure him a readier market, than otherwise he could find; which, when grain is plenty, is a great temptation. But, in this way, are many brought to suffer by wild speculators, or people without capital.

If these observations can have any influence upon immoderate ambition, and consequently wild and extravagant speculation, it will fully reward the writer's trouble, and perhaps render some degree of service not altogether unacceptable to the public.

GORDIUS.

NOTE BY THE CONDUCTOR.

WITH submission to our respectable correspondent, we feel it a duty to remark, that most of the doctrines inculcated in the above paper are pretty much in unison with the general sentiments of mankind. Corn, undoubtedly, is an article of trade the most necessary and indispensable; though, from the uncertainty of seasons, subject to greater fluctuation of price than other commodities. This fluctuation furnishes room for speculation, in the exercise of which, great loss may be sustained, or great profit may be gained by those concerned. The truth of these leading positions, together with that of another, namely, that plenty will infallibly bring down prices, and scarcity raise them, is sufficiently ascertained. But there are other points touched upon in the communication before us, which seem to bear a more questionable character. These shall be briefly noticed.

In the *first* place, the chief object of this interesting paper may be considered as an attempt to convince the public, that corn will become universally plentiful, consequently cheap, when peace is restored to the nations of Europe. The arguments used by the author in support of this opinion, may, in some degree, be estimated as well founded; though, according to our views of the subject, corn cannot possibly fall so low as we have seen it, because the increased and increasing value of labour must prevent such a reduction; and even were it to happen, cultivation would in a great measure be renounced, till prices returned to an appropriate standard. Allowing prices were to fall 15l. per cent. below those of the present moment, British agriculturists would not suffer, providing the war taxes were abolished; and a fall of this extent would only bring the market value of corn to the rates at which it can be imported, duty free. We are clear that he who calculated higher than the importation rates, when framing proposals for land, leaned to a rod, which, like that of Egypt, may one day or other pierce his own side; whereas, those who assumed these rates as the basis on which their offers were formed, may

be conſidered as having no cauſe for alarm, were peace ſettled to-morrow. Were our author correct in his chain of reaſoning, peace ſhould be dreaded as the greateſt evil that could befal us, and everlaſting war regarded as the neceſſary ſafeguard of Britiſh huſbandry. We admit in the fulleſt manner that war cauſes the price of produce to advance, eſpecially in a nation that depends, in ſome meaſure, on foreign ſupplies; but it ought to be remembered, that war is neceſſarily accompanied with heavy burthens; and, in particular, that during the preſent one, theſe have been laid on huſbandmen with more ſeverity than on other claſſes, though not noticed in the paper before us.

In the *ſecond* place, we lay it down as a primary principle, that the market value of corn will always be regulated, not by the quantity of produce preſented in the market, or the ſum of money which the dealer may have in his pocket, but by the affinity which that quantity bears to the market demand. Now were Britain, nay the whole world, cultivated like a garden, and were produce increaſed in a tenfold degree, ſtill there can be no moral impoſſibility againſt a demand appearing for all this vaſt increaſe of agricultural produce; becauſe, that ſtrong phyſical obſtruction, want of food, being removed, population might increaſe in the like ratio with improved agriculture. No farmer, poſſeſſed of the leaſt conſideration, increaſes the number of his live ſtock before additional food is provided for their ſupport; and ſomething of the like nature muſt be done for the human race, before their numbers can be materially increaſed. We do not ſpeak of a pariſh, of a county, or even of a kingdom; becauſe, in that limited view, the neceſſaries of life, when wanted, can be obtained from other places where a ſuperplus may remain; but our obſervations apply to population on the great ſcale, the poſſible extent to which ſuch may be augmented being incalculable. This might be exemplified by the actual ſtate of China, and by the rapid increaſe which occurs in every new ſettled country where proviſions are plentiful. In ſhort, were the nations or families, into which mankind are divided, to lay aſide their ſwords and their guns, and confine themſelves to ploughſhares and pruning hooks, there is no ſaying how rapidly the earth might be improved, or what number of inhabitants might be ſupported by its produce. So long as food was obtained, ſo long might an increaſe go forward, while employment would not be more wanting than at the preſent time. Man works for man; and, increaſe his numbers to the greateſt poſſible extent, the field of employment will furniſh buſineſs to the greater as it did to the ſmaller number.

In the *third* place, though the price of corn in different ſeaſons varies very much, yet it is not to be inferred that the profit of the cultivator alters and varies in the ſame ratio. Unfavour-

able

able ſeaſons occaſion ſcanty crops, and their concomitant high prices; but, under theſe circumſtances, the farmer's ſales are ſo greatly curtailed, (his home conſumption being the ſame in the worſt as in the beſt year), that often he is not benefited ſo much as when prices are more moderate. Crop 1805 may perhaps be quoted in ſupport of what we are now maintaining. Taking it all and all, its produce was above a medium; and though prices were conſiderably below thoſe of the current crop, yet it is not ſuppoſed that the riſe of prices this year will compenſate the actual deficiency of produce. In 1799, many farmers could do little more than pay their rents, notwithſtanding the amazing prices given for grain. They had it not to ſell, therefore could not be benefited. From theſe fluctuations of crops and prices, no evidence however is furniſhed that corn, when the value of money is conſidered, will fall ſo low as it was in former times. When wheat was at 20s. per boll, farmers of that time had as much cauſe to dread, and really did dread, that it would fall to 14s. or 15s. as we now have to apprehend that it will return to the prices current only fifteen or ſixteen years ago. Indeed, when at 14s. or 15s. the ſame fears operated on the minds of many people which ſeem to affect our author at this moment.

In the *fourth* place, we are always ſceptical, with regard to the influence which an increaſe or reduction of the circulating medium may have upon the market value of grain, unleſs it be in dear years, when an increaſe of medium, no doubt, enables the purchaſer to pay a high price, when he cannot obtain the article on lower terms. If a man has five pounds in his pocket, and wants to purchaſe a boll of wheat, he will not give more than market value for it, merely because he has the means with him. No—he buys it, if in his power, for thirty or forty ſhillings, though, having five pounds, he was certainly able to give that ſum to the ſeller, providing that was its market value. It is exactly in this way, that an increaſe or reduction of the circulating medium operates upon markets. The largeſt ſupply of money will not raiſe prices, if the ſupply of grain preſented exceeds the demand, though, *vice verſa*, this ſupply of money enables the purchaſer to procure the quantity wanted, if ſuch is within his reach.

Laſtly, with regard to what is ſaid concerning Dr Paley's thoughts on population, we are inclined to believe that our reſpectable correſpondent has fallen into a radical error, by ſubſtituting *years* for *generations*, when making his geometrical calculations on the increaſe of mankind. It can hardly be ſuppoſed, that the progeny of the original pair would exceed the number of *ten* in the 27th year, whereas they are rated at as many hundred millions. Again, as to the increaſe of their capital, we are led to ſuppoſe that, if 500*l.* gained 1000*l.* in the firſt year, 1500*l.* would, on the like principles, gain 3000*l.* in the ſecond, and ſo

on as the stock increased, in all time coming, which would furnish a result very different from the one given. Dr Paley's ideas on population seem tolerably correct; and we are clear that an increase of mankind would take place in something like a geometrical progression, were not that increase retarded both by moral and physical causes. We see in every new settled country, where provisions are plentiful and cheap, and marriage early entered into, that population increases much faster than it does in old settled countries, where riches are accumulated, and luxury has diffused its baneful influence. In such countries population becomes in a manner stationary; in other words, it is restricted to the number who can find employment and sustenance. Corn, like mankind, would also increase geometrically, were the whole that is produced to be always sown again; but, as nearly the like quantity is only annually sown, the increase must be computed on principles very different; of course, the number of inhabitants of every country, already fully cultivated, can only be increased, when improved husbandry is practised, whereby a given spot of ground is made to yield a larger quantity of produce, or by importing supplies from other places. Britain, for several years past, has been placed in the last mentioned situation, and obliged to make purchases of food from other nations, in lieu of which she has exchanged the produce of her other manufactures; though it deserves to be mentioned, that many sources of supply remain at home, whence the present population might draw full support, did not legal restraints prevent them from being opened or touched.

As discouraging conclusions might have been drawn from some part of what is stated by our respectable correspondent, we have used the freedom to offer these passing remarks; and should his meaning have been mistaken in a single instance, we look for excuse, seeing that, if an erroneous view has been taken, the error is wholly unintentional. N.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On the Cultivation of Kelp.

SIR, *Balmacara, 30th October* 1806.

As I have not the opportunity of perusing your valuable publication so regularly as I could wish, I am uncertain whether the cultivation of kelp shores falls within the plan of your work. I have of late paid some attention to that subject; and if you esteem the following facts and observations worthy of a place therein, they are very much at your service. I am, with much respect, Sir, your obedient humble servant,

THOMAS DUDGEON.

THERE

THERE has been kelp manufactured this ſeaſon on the eſtate of Lochalſh in Roſsſhire, the property of Hugh Innes, Eſquire, at A, which is ſituated at the confluence of the Lochs Duich and Long, and at D, on the ſhore of Lochcarron. The quantity of ſhore A, from which the ware was cut, amounted to 4 acres 3 roods 1 fall Scots, and produced of kelp Tons 7 : 10 cwt. of 21 cwt. to the ton, which is the ſelling weight in this country.

The ſhore D meaſured 8 acres 1 rood 1 fall, and produced of kelp only - - 5 : 20

Tons 13 : 9 cwt.

From theſe diſproportions, it is evident there have been ſome very conſiderable differences between theſe crops, or in the management of them. The crop of kelp-ware on A was cut at the age of three years; that on D was cut at five years old; which tends to confirm a generally acknowledged opinion among kelp manufacturers, that ſea-ware is at its prime at three years old for producing kelp; and that every year thereafter it loſes ſubſtance. And, in one reſpect, this is evident to the eye, as it gets much thinner in the ſtems and leaves. Perhaps chemiſts may be able to aſſign other reaſons, which may gratify curioſity. However, in this particular caſe, there were other evident circumſtances which accounted for the ſmall produce of kelp from the larger quantity of ſurface. Though the weather was pretty favourable for manufacturing ſhore D; yet there was one acre of it which was not ſo cloſe a crop, owing to the ſtones upon it being too thin on the ſurface; and, upon examining ſhore D, it apparently was not ſo cloſe cut as it ſhould have been, which the kelper accounted for by ſaying, that the tides were not perfectly favourable; and, moreover, nearly the one half of the ware, after being cut, required to be floated a very conſiderable diſtance to the burning kilns; in which operation ſome of it might have been loſt: whereas, on ſhore A, the crop was, and muſt always be, good, from the favourable ſituation of the ſhore, and the ſtones upon it; and the diſtance of floating it was very ſhort. Notwithſtanding, even the produce from A was not ſo much as there was reaſon to expect. During the time of manufacturing it, the weather was very unfavourable, being exceſſively wet. It is true, the kelper inſiſted, that he had manufactured all the quantity cut; but ſome doubts might be entertained of his veracity; becauſe a very active kelper from the iſland of Skye purchaſed as much growing ware on the ſame ſhore, and at the ſame time, as would produce a ton of kelp; and there is credible information that he loſt the one half of it by the unfavourableneſs of the ſeaſon. In ſhort, theſe and other circumſtances render any *data* on

this ſubject very vague. It is well known, that the different kinds of ware produce a leſſer and greater quantity of kelp; and theſe different kinds muſt frequently grow promiſcuouſly, in unequal quantities.

The kinds of ware moſt frequently manufactured into kelp in this diſtrict, are the bell or knotted ware, and the ſea-oak; the former of which is eſteemed the moſt productive of kelp. This may be another cauſe why the ware on ſhore A produced a greater proportion than D; it having a greater mixture of the bell-ware than ſhore D.

The expenſe of manufacturing kelp has, like every other operation, increaſed conſiderably of late years. Lord Seaforth's factor in the pariſh of Kintail, employed a kelper from the Iſle of Skye, to manufacture the kelp on that eſtate laſt ſummer. He engaged to give him what he calls the extravagant hire of 4l. per ton, beſides furniſhing him with the uſe of a boat, (perhaps of two or three tons burthen), hooks or ſickles for cutting the ware, kelping irons or *clads*, and creels and hand-barrows, with lodging, pots and diſhes for preparing victuals for the kelpers, who might amount to about ſixteen perſons. It was propoſed to have ſet Mr Innes's kelp ſhores, for laſt ſeaſon, at a rent certain; but a diſappointment prevented that ſcheme. It was therefore neceſſary to employ people on the eſtate to manufacture it on Mr Innes's perſonal account. Though it may appear a little ſtrange, the inhabitants of the Mainland, in this diſtrict, do not employ themſelves ſo much in this manufacture as the iſlanders. It being the cuſtom for the Mainland proprietors to hire kelpers annually at the Iſle of Skye markets; of courſe, our own people are leſs expert at the operation, and, conſequently, more expenſive ſervants. Notwithſtanding, it is very evident, that it would be the true intereſt of the Mainland proprietors to employ the poor people on their own eſtates in this manufacture. Moreover, it became neceſſary to engage the individual labourers at higher rates than what an experienced and economical iſlander would have done. The particulars of manufacturing and ſhipping the above quantity of kelp are as follow.

The manufacturer or kelper had 30s. per ton, which, on 13 ton 9 cwt., amounted to - - -	L.	19	10 0
A foreman or grieve, 58 days, at 2s. -		5	16 0
11 men labourers, 46 days, nearly at 1s. 2d. -		29	10 4
5 women ditto, 46 ditto, at 6d. - -		5	15 0
7 ditto ditto, 2¼ ditto, at 6d. - -		0	8 9
Beſides this money wage, each fixed labourer, of whom there were 17, had 1 ſtone of oat-meal per week.—			
17			
Carry over	L.	61	0 1

Brought over	L. 61	0	1
17 bolls 1 firlot 2 pecks was given them, which, at 22s. per boll, is	19	2	3
Allowance to each of these 17 for shoes, 3s.	2	11	0
Hire of a boat during the work	1	0	0
Incidental expences for hooks, smiths' work on irons, whisky to labourers, iron, &c.	3	7	4
Expence of shipping kelp, boat hire, &c.	1	9	6
Total expence	L. 88	10	2
The kelp manufactured, 13 tons 9 cwt., was sold at 8l. per ton	107	8	7
Net profit only	L. 18	18	5

—which is about 1l. 8s. 1d. per ton; whereas, had the same quantity of kelp been manufactured by the Skye kelper employed by Lord Seaforth's factor, extravagant as his wages above stated were esteemed, there would have been an additional profit to the proprietor of no less than about 2l. 10s. per ton. At same time, it is not meant to be asserted that such a saving would always accrue. On the contrary, it is pretty certain that this Skye kelper must have suffered considerably by his contract, and that owing entirely to the unfavourable season.

The share of the above expense, which was incurred on shore

D, amounted to	L. 34	6	7½
That against A, was of course	54	3	6½
	L. 88	10	2

On calculation, it will be found, if the weather had been equally favourable at the time of manufacturing shore A as shore D, there would have been a saving on shore A of about 4l. 18s. Also the shore A, as above noticed, is situated more conveniently for burning than shore D; therefore, in a comparison between A and D, the saving on this account must also be placed to the debit of shore A.

On the foregoing statement of expense, it may be remarked, in general, that the wages given to the kelpers and mere labourers appear to have been too high, and also that too great a proportion of men were employed, as the opinion was, that every woman did as much work as any man; of course, more circumspection must be used next season. At same time, it is acknowledged as perfectly fair, that kelpers should be allowed more wages than any other labourers, they being frequently exposed during night to wet from above and below, and generally to bad accommodation. A day-labourer's wage here is 1s. 6d.; and the peck of oatmeal can, on an average, be always obtained under this sum.

From

From the above statement, it appears, that the average quantity of kelp manufactured from the above shores, was about one ton and two thirds of a hundred weight, *per Scots acre*; and it is humbly thought that, in general, this produce may be reckoned on with safety. Indeed, it is presumed to be rather below the average produce of kelp from the shores of the Western Highlands and Islands of Scotland.

It is presumed that the average rent paid to proprietors of kelp shores, for several years past, may amount to about 3l. per ton; and it is thought that this sum may be counted on with certainty, so long as Government preserves the duty on barilla, which it is certainly sound policy to do. There are immense tracts of shore on the Mainland and Islands, which may be easily cultivated for the production of kelp, from which, at present, not one penny is derived. All the cultivation requisite, is to place whin or other hard stones, not under the size of the crown of a hat, upon such vacant spaces. Several people with boats on Mr Innes's property, have been contracted with to plant four acres of shore with such stones, at the rate of 20l. per Scots acre. Such stones are generally to be found at high water mark, on all the shores of the lochs of the Highlands. They are put into the boat at high-water, and then carried to the ground to be planted, and thrown overboard; and on the ebb of the tide they are distributed regularly over the shore, preserving a clear space round every stone of one foot; which distance, after very minute examination, appears to be the most eligible for producing the greatest crop of ware. It is evident these stones should be of a round shape; the more surface being exposed to the alternate action of the air and water, so much more kelp-ware will be produced from a given space of ground. In four years the first crop may be cut; which, on the above *data*, will yield about 4 per cent. on the original expense. But the crop may be manufactured into kelp in every third year thereafter; which, on the same *data*, is equal to about 5 per cent. In this improvement, there is no hazard of bad crops; and if the manufacture is begun early enough in the season, there is little danger to be apprehended from bad weather; it being understood, that the operation of kelp-making can be carried on, should there be no more than two dry days in eight. This cultivation is therefore humbly recommended to the serious and immediate attention of all proprietors of sea-shores. Fractional accuracy has not been attempted in the above statements, such being esteemed, on subjects of this kind, mere affectation. But it is thought, if there be any errors, they are on the side of moderation.

Some kelpers say that 1050, others say that 900 creelfuls of ware (bell-ware and sea-oak) will make a ton of kelp. The aver-

age

age of these quantities is 975. In order to ascertain the extent of shore necessary for the growth of this quantity of ware, there was measured, with all possible accuracy, a fall of ground on A, two on D, and another at K; the last situated on the shore of Lochalsh. And an average crop on each of these places was chosen, as near as could be guessed by the eye. And all these crops were of three years growth, except that on D, which, as stated above, was of five years.

			Creelfuls.	*Weight.* *Cwt. qrs. lib.*		
The fall on A being composed of nearly equal quantities of bell-ware and sea-oak, produced			12	5	2	26
	Cwt.	*qrs.*				
On one of the falls of D grew the bell-ware, which measured 11 creelfuls, and weighed	7	0				
On the other fall of D was sea-oak, measuring 9 creelfuls	3	2				
The averages of which are			9	5	1	0
The fall K grew sea-oak, with a small mixture of bell-ware; it produced			10	5	3	0
The average of these numbers are, $10\frac{1}{3}$ creelfuls, and 5 cwt. 2 qrs. $8\frac{1}{2}$ lib.			31	16	2	26

Of course, a Scots acre should produce about 1653 creelfuls, weighing about 44 tons 12 cwt., which, according to the above opinion of kelpers, would produce about 1 ton and 14 cwt. of kelp of 21 cwt. per ton, which is about 13 cwt. more *p.* acre than the result of the above manufacture.

The size of the creels here alluded to, are similar to those used by the Edinburgh porters. One of the largest, on measurement, was found to contain 6000 cubic inches; one of the smallest measured about 3840 inches cubic: So the average size of these creels may be estimated at about 2.8 cubic feet. The people, at filling them with ware, cram and heap them.

Therefore, should there be any doubts as to the propriety of cultivating kelp shores, for the purpose of making kelp, (of which there certainly should be none), it appears clear, by the last experiment, that, as a manure, it is still more worthy of attention, every ton being surely worth 3s., which, at the above expense of cultivation, would pay more than 10 per cent.

The mode of cutting and manufacturing kelp on the west coast of Scotland, appears slovenly. No attempt seems hitherto to have been

been made to cut the tangle (*Fucus digitatus* Linnæi), which is almoſt never uncovered by the loweſt ebbs, and is a moſt valuable ware. A ſcheme for doing ſo is in contemplation.

It appears a much more rational plan for proprietors to improve the property they preſently poſſeſs, than to make new purchaſes, and leave the whole to their heirs in a ſtate of nature. The improvements which may be made in the Highlands at a ſmall expenſe, by draining, watering, and trenching, are immenſe. The inhabitants ought therefore to feel the moſt lively gratitude for the intereſt and exertions which Government are taking for the improvement of the country, by roads, bridges, and canals. At ſame time, it appears a matter of great ſurpriſe, that Government ſeems, in a great degree, to overlook the incalculable advantage it would be to the nation at large, were the deep ſea, or Dutch mode of fiſhing herrings introduced on our own coaſts. It certainly would be no difficult or expenſive undertaking, to liberate ſome of our Dutch priſoners, and equip a few veſſels for this purpoſe, under the immediate ſuperintendance and direction of a perſon of acknowledged ſkill and perſeverance. The ſucceſs of the ſcheme it is humbly, but confidently thought, would be of more real and immediate advantage, than all the roads, bridges, and canals in the Highlands. It appears no difficult matter to prove, that the herring fiſhery, as it is preſently conducted, does, on an average of years, as much real evil as good to the inhabitants of the Highlands and Iſlands of Scotland.

D.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

Some particulars reſpecting the Husbandry of East Kent, and the Mode of Cropping adopted there.

SIR,

I TAKE the liberty of handing you a few particulars of the *round tilth ſyſtem*, as purſued on our good lands in East Kent, which may be inſerted in your Magazine, should you judge them of ſufficient importance.

Rotation.—1ſt, Barley—2d, Beans—3d, Wheat.

The wheat *gratten* is ploughed directly after the wheat-ſeed is finiſhed, if the weather is dry, and croſs-ploughed as ſoon as poſſible in the ſpring; again ploughed two or three times, according to the cleanneſs of the land. And, in April, barley is drilled in rows, from eight to ten inches apart, at the rate of 2½ or 3 buſhels per acre. The crop is hand-hoed and hand-weeded. As early as poſſible next winter, manure is carted out, (40 or 50 two-horſe cart loads per acre), ſpread upon the barley ſtubble, and

and the land ploughed. Beans are drilled eighteen or twenty inches apart, 3½ and 4 bushels per acre; and as soon as they are up, the land is harrowed across the rows, and horse and hand-hoed, (generally three times each), and kept completely clean. At the last horse-hoeing, the beans are earthed up with a plate; and when harvested (often before the beans are carried), the land is broad-shared or *spuddled*, and the rubbish (if any) either burned or carried off, till perfectly clean. It is then ploughed, and either drilled with wheat, 3 bushels per acre, or sown broadcast, from 3½ to 4 bushels: the wheat, if drilled, is hand-hoed and hand-weeded; if sown, hand-weeded only. This is the old Kentish *round tilth*; and on good land is very productive. What breadth of clover is wanted for soiling (universally practised) is sown, of course, on the barley, and is again broken up with the bean *gratten* for wheat. Our land is ploughed with a turn-wrest plough, perfectly flat (as if dug with a spade), from five to seven inches deep for corn crops; and in wet soils, ploughed also with a turn-wrest, in flat ridges, half a rod or a rod in width; and the furrows are opened, after the corn is harrowed in, with an old plough with a double wrest, which lets off the water, so that the marks of the furrows are scarcely visible. In this way, when the corn is in ear, the fields always have a very neat and husbandmanlike appearance, far superior to the high round ridges of many other counties, where the tops carry the only good crop, and the lower parts generally a mass of rubbish. It also is very favourable for mowing the corn, and when the land is required to be laid down in pasture. No where are seen sush good crops on poor land, nor crops, in general, so clean and free from weeds as in Kent.

In addition to the above description of what is called the *round tilth of Kent*, I beg leave to subjoin an account of the mode of farming pursued by myself. According to it, the land is kept in a constant state of amelioration; and few (very few) acres ever require summer fallow, whilst the crops are large and the value considerable, as may be seen from the under mentioned averages. If the land, in the course adopted, tires of broad clover, a crop of spring tares can be taken: if potatoes are thought to recur too often, Mazagan beans may be drilled in furrows, eighteen inches apart; and, at their last earthing, turnips may be sown, in which way they often succeed as well as if cultivated on a fallow.

Eighty acres of good loamy soil, worth from 20s. to 30s. *p.* acre, and managed in the following course—1st, Potatoes; 2d, Barley; 3d, Clover; 4th, Wheat. Mode of operation—After wheat season, the *wheat gratten* is ploughed; and, in the spring, the dung (long) 30 loads per acre, is carted out, and spread on the land. In April or May, potatoes are planted (6 sacks per acre), by opening

opening balks with a plough, at eight to the rod; and the seed is covered by splitting the balks. It may perhaps be more eligible, not to carry out the dung till after the balks are opened, when it may be put into them by men from the cart, *before* or *after* the seed. When the potatoes appear, the land is dressed down fine; hand-hoeing and skimming are given through the summer; and, in August, they are earthed up with a double mould-board plough. In November, the crop is ploughed up by the same plough, opening every other furrow, and gathered by women. Then the other furrows are opened and picked; the ground wrought with heavy harrows well loaded, and again picked. The land is then left till spring; and, in March, ploughed, and immediately drilled with barley, (3 bushels per acre), from seven to nine inches apart. The barley, when up, is hand-hoed, and sown with clover, which may the next spring be either coal-ashed or gypsumed. The clover (if near a town where there is a demand for green food, may be sold standing; the purchasers being at all expenses of removing it, &c.) is either fed with sheep, in which case some trefoil seed should be mixed, till June, and then seeded; or the first crop, or both, are mown for hay. In November, the lea is ploughed and drilled with wheat, 3 bushels per acre, from seven to nine inches asunder; and well hand-hoed and hand-weeded during the summer.

POTATOES—Expenses 1st Year per acre.

	L.		
Ploughing the wheat gratten -	0	10	0
Harrowing -	0	1	0
30 Lds. long dung and carriage -	7	10	0
Spreading -	0	1	6
Furrowing and covering the seed -	0	5	0
Seed and planting -	2	0	0
Harrowing when the potatoes appear -	0	0	6
Hand-hoeing -	0	4	6
Skimming and earthing up - -	0	7	0
Picking up 120 sacks, at 3d. - -	1	10	0
Ploughing up, harrowing and storing, &c.	1	15	0
Rent and rates, 40s.—tythe, 8s. -	2	4	0
	L. 16	8	6

Produce per acre.

	L.		
120 Sacks, at 4s.	24	0	0
Expenses -	16	8	6
Profit per acre	L. 7	11	6
Profit on 20 acres	L. 151	10	0

2d

2d Year, BARLEY.

One ploughing	L. 0	12	0
Harrow and roll -	0	4	6
Drilling and hand-hoeing	0	5	0
Mowing - -	0	2	6
Binding, 2s.—carrying, 6s. - -	0	8	0
Thrashing -	0	12	0
Binding straw -	0	4	0
Seed - -	0	11	0
Rent, rates and tythe	2	6	0
	L. 5	5	0

Produce.

6 Qrs. barley, 30s.	L. 9	0	0
2 Loads straw -	4	0	0
	L. 13	0	0
Expenses -	5	5	0
Profit per acre	L. 7	15	0
Profit on 20 acres	L. 155	0	0

3d Year, CLOVER.

Seed and sowing -	L. 0	8	0
Stone-picking -	0	2	0
Coal-ash or gypsum -	1	10	0
Mowing and harvesting	0	15	0
Rent, rates and tithe	2	6	0
	L. 5	1	0

Produce.

4 Tons hay -	L. 12	0	0
Expenses -	5	1	0
Profit per acre	L. 6	19	0
Profit on 20 acres	L. 139	0	0

I have sold clover standing to cow-keepers, &c. as high as 17 guineas per statute acre.

4th Year, WHEAT.

Ploughing - -	L. 0	12	0
Harrowing & Drilling	0	5	0
Handhoeing - -	0	3	0
Harvesting, &c. -	0	18	0
Thrashing, &c. -	1	1	0
Seed - - -	1	2	6
Rent, Rates and Tythe	2	6	0
	L. 6	7	6

Produce.

4 Qrs. Wheat, 3l.	L. 12	0	0
Straw 48s., Stubble 6s.	2	14	0
Produce	L. 14	14	0
Expenses	6	7	6
Profit *per* acre	L. 8	6	6
Profit on 20 acres	L. 166	10	0

RECAPITULATION.

	Expenses.	*Produce.*	*Profit* p. *Acre.*	*Profit on* 20 *Acres.*
Potatoes	L. 16 8 6	L. 24 0 0	L. 7 11 6	L. 151 10 0
Barley -	5 5 0	13 0 0	7 15 0	155 0 0
Clover -	5 1 0	12 0 0	6 19 0	139 0 0
Wheat -	6 7 6	14 14 0	8 6 6	166 10 0
		Total Profit *per Annum*		L. 612 0 0

Trusting

Truſting the above may be of ſervice to your readers, and ſerve as an inſtance of my deſire to ſupport the Farmer's Magazine, I am yours, &c.

A MAN OF KENT.

NOTE BY THE CONDUCTOR.

THOUGH the rotation, mentioned by our reſpectable correſpondent in the above letter, abſtractedly conſidered, is far from gaining our approbation, yet, as it appears to be executed with much advantage to the occupier, we muſt preſume that it is well calculated for the ſoil and climate of the diſtrict in which it is practiſed. Judging, however, by the expenſe of labour in our own country, we are inclined to believe, that the charges of management are conſiderably underrated, or that the full particulars are not expreſſed.—As, for inſtance, what are we to think of the culture of a potatoe crop, which had got no more than one *clean* ploughing; or of a courſe of crops, where no more than three ploughings are given in four years? Such a mode of culture may, for all we know, anſwer well in the fertile diſtrict of Kent; but in almoſt every other part of the iſland, where huſbandmen muſt earn their bread by the ſweat of their brows, would run out the land, and greatly deteriorate the ſame in a few ſeaſons.

With regard to the annual profit, all we can ſay is, that it is a good thing to be a farmer in Kent. If eighty acres of land, which will leave a gain of 612l. to the tenant, can be rented at 100l., or even 120l., then, to be ſure, the criterion adopted by the Miniſter, in aſcertaining the property tax upon tenants, is a falſe one. The Miniſter was pleaſed to conſider the income of ſuch, as not exceeding one half of the rental; whereas, it would appear, from the above ſtatement, that the rental does not, at the moſt, amount to one fifth part of the income. N.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

Queries relative to the Smut.

SIR,

I HAVE obſerved, ſprung from the ſame ſeed of oats, three ſtalks, one of which bore a head entirely ſmutted or blacked; another had a healthy head, entirely free from that diſeaſe; and the head of the third contained grains, partly ſmutted, and partly free from ſmut. Theſe ſtems were all vigorous, and the ſmutted head had not opened to the day.

Many heads of wheat, alſo, I have ſeen containing grains, ſome freſh, and others ſmutted, in the ſame head.

Now,

Now, I beg to aſk the following queſtion, with theſe facts in view: Upon what principle does pickling or ſteeping ſeed wheat act in its ſuppoſed operation of preventing ſmut?

Further, Did ever any one ſee a field of wheat entirely free from ſmut, whether the ſeed had been pickled or not? If the anſwer is negative, as I believe it will be, Does this denote, that pickling the ſeed is not infallible in preventing ſmut, or what elſe? And if infallible, Why are not ſeed-barley and oats alſo pickled, to prevent the ſmut? A. S.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

A New Edition of Language to Horſes recommended.

SIR,

ALTHOUGH I have poſſeſſed a piece of ground for a long time, yet I cannot pretend to be a farmer. One thing, in practice, ſtrikes me as requiring amendment, namely, the language uſed to horſes, which varies in every diſtrict. I obſerve, with grief, that every one who works horſes adopts a different language or mode of ſpeaking to the animal. Hence, every new ſervant that a farmer gets has a different mode of ſpeaking to his horſes, which it is impoſſible they can underſtand; and becauſe they don't underſtand it, the poor creatures muſt undergo many a ſore thraſhing, till they comprehend what is meant. This comes to paſs ſo frequently, that a remedy ſhould be provided. When a horſe is ſold, he is ſubjected to the ſame treatment; and by ſuch uſage, the poor animal is, in many caſes, rendered altogether ſtupid; but, beſides the whipping the poor beaſt gets, the work is frequently not ſo well executed, whilſt the harneſs and implements are broken or injured.

Now, what I would propoſe is—That ſome of your gentlemen farmers, or ſociety of farmers, ſhould meet and chooſe a few ſhort words that may ſerve to direct horſes in all caſes, and explain when and how they are to be uſed, which may be done in very little room. Alſo, every farmer ought to be enjoined to get a copy thereof; and every lad that pretends to work with horſes, to have it by heart; and whoever deviates from it, let him be caſhiered; for, if there was one mode of ſpeaking to horſes at work through the whole nation, it certainly would be of great utility.

If you think the above deſerves a place in your Magazine, it may ſtimulate ſome qualified farmers to do the needful, and will oblige many of your readers, and none more than, Sir, yours, &c.

A FRIEND TO AGRICULTURE.

Kilmarnock, 11. Oct. 1805.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

Remarks on the High Rate of Rent, and Prices of Provisions and Labour.

(*Vide* two Essays on these Subjects, No. 27.)

SIR,

PERMIT me to send you a few remarks which occurred to me on reading two papers in the 27th Number of your Magazine; the one entitled, 'Considerations on the Present High Rate of Rents;' and the other, 'On the Prices of Provisions and Labour.'

The rapid progress of agricultural improvement during the last twenty years, must afford much pleasure to every lover of his country. I was in hopes that this improvement was founded on a solid basis; and so very agreeable was this belief, that I indulged myself in the prospect of its continuance. Your correspondent, however, 'on the present high rate of rents,' seems to entertain a different opinion; and, fancying that he sees farther into futurity than other people, has prophesied, most authoritatively, the ruin of all agricultural speculators. In every kind of business, there will be adventurers without the necessary knowledge and capital, and in that of agriculture, among others. The fate of these people, it is very evident, must be bankruptcy sooner or later. I cannot however, bring myself to think that this misfortune will happen to the whole, or even to a considerable number of the farmers, who have of late years commenced their career. I shall take the liberty of examining the arguments upon which your correspondent has founded so gloomy a presage; and I hope to satisfy your readers, before I close my remarks, that there is no ground for any alarm of the kind.

It is said by your correspondent, that 'the landlord finding his interest advanced in receiving a higher rent, and his estate improved, at same time, by preferring such tenants, has adopted the system of throwing a number of his smaller farms into one, and from the number of competitors this mode of policy brings forward, he has it in his power to exact the highest rent that his lands will yield. How far such policy will ultimately prove successful, time only will determine.' This gentleman, in the passage which I have just now quoted, would seem to condemn the policy of landed proprietors throwing several farms into a large one. Although I am most clearly of opinion that large farms are more beneficial to the country, to the landlord, and to the tenant, than small ones, I shall not now enter into the question. I shall at present

present do no more than point out a mistake into which your correspondent has unwarily fallen. It is very evident, that the price of any commodity will be in proportion to the demand and quantity combined, and that demand must be regulated by the power or ability of purchasers. Let a distrist of country be divided into a thousand farms of 100l. a year each, and another of the same extent, into one hundred farms of 1000l. *per annum* each. Let it be supposed, also, that the agricultural capital in both of these districts is the same. Now, let me ask your correspondent, in which of these two districts will there be the greatest demand for farms? Surely in the former; for the ability of the individuals to take farms, is as a thousand to a hundred, or ten to one. As there can be no doubt, for the above reason, that there will be more bidders for small than for large farms, the rent of the former ought to be higher than that of the latter, from the competition being greater in the one case than in the other. The number of competitors, therefore, in the case of large farms, cannot, according to the foregoing reasoning, enable the landlord to exact the highest rent his lands will yield, as alleged by your correspondent. If large farms do afford a higher rent to the landlord than smaller, it must be for other reasons than the number of competitors. The principal cause is, that by a more enlightened and economical mode of arrangement, and by fewer hands upon large than upon small farms, there must necessarily remain a greater quantity of superfluous produce for market in the one than in the other. At settling the terms of the lease, part of this overplus is supposed to go to the landlord, and part to the tenant; and for the same reason that a landlord gets a higher rent for the farm, the tenant makes a greater profit. I could give various other reasons, perhaps of equal effect, to account for the fact; but that would be taking up the room of your Magazine with a discussion foreign to the point at issue. It is enough if I have demonstrated, that the exaction of higher rents for large farms, as your correspondent terms it, is not owing to a competition among agricultural bidders.

Your correſpondent is of opinion, that 'if the ſyſtem continue to gain ground, a number of perſons engaged in the cultivation of the ſoil muſt emigrate, as has been the caſe in the Highlands.' This ſentence contains the enunciation of what has been termed a truiſm, and, therefore, I am not diſpoſed to deny the aſſertion. It is more likely that I ſhall differ with him in regard to the nature of the effects, good or ill, to be produced by that cauſe. To me it appears as clear as noon-day, that agriculture is to be more improved by the cultivators of large than ſmall farms, and, therefore, this ſyſtem muſt be adopted, whatever emigra-

tion may be the conſequence. Good ſeldom comes unattended with ill, and in moſt caſes it is but a choice of two evils. In the preſent, a great and eſſential good is promoted, with a little partial evil. I do admit that, at the date of the change of the ſyſtem from ſmall to large farms, and for a little time thereafter, the competition for farms will be upon the decreaſe; but I apprehend that the demand, and the article for which there is a demand, will ſoon find their level. If this ſhall be the reſult, then the number of actual farmers will bear the ſame proportion to the farms in the market; and the competition will be the ſame for large, as when ſmall farms were the order of the day. It follows, therefore, that landlords need be under no apprehenſion of being under the neceſſity, on this account at leaſt, of changing their ſyſtem, and of again returning to that of ſmall farms.

It cannot be denied, that the quantity of grain raiſed in Great Britain is unequal to the conſumption of the inhabitants; but ſtill there is nothing prepoſterous in abſtracting from agriculture a number of hands employed in it. I have already ſaid, and it cannot be denied by any perſon in the ſmalleſt degree acquainted with the ſubject, that the ſuperfluous produce of a large farm for market uſe, is much greater than from a number of ſmaller farms embracing an equal quantity of ground. If this be the caſe, then, it follows, that there is not only nothing abſurd in leſſening the number of cultivators, but a clear gain made, in proportion to the number of uſeleſs mouths that are thus ſet adrift. If there be as much raiſed, and leſs conſumed, then the nation gains in proportion to the difference between the quantity grown and the conſumption, and this ſuperfluous produce, that was in uſe to be conſumed by an unproductive claſs of people, will go to the ſupport of many other orders of ſociety, who will carry on the ſyſtem of reproduction for ever.

Your correſpondent, ‘ on the prices of proviſions and labour,’ ſtates, ‘ that the numerous petitions of our manufacturers againſt the late corn bill, appear to have proceeded upon this principle, that a low price of grain would be accompanied by a correſponding low price of labour;’ a poſition which he denies, and aſſigns his reaſons for the refuſal of his aſſent to it. That ſuch was the idea of the manufacturers, in the oppoſition they gave to the corn bill, there can be no doubt of; and, inſtead of being theoretically and practically erroneous, it is moſt ſound and juſt. Common ſenſe, I ſhould imagine, might teach the meaneſt underſtanding, that, as labour muſt be paid for by proviſions, the money which repreſents theſe proviſions, muſt be in a greater or a ſmaller quantity, according to the price. If proviſions be repreſented by 6, and labour paid by that number, then, if proviſions be

be represented by 12, labour will be compensated by that number also. In short, if provisions be dear, labour must be dear also, otherwise the proportion which necessarily exists between these two, if left to themselves, has been somehow or other deranged, and the people, who are the customers, must be more or less in a state of want. Indeed, it is upon this proportion which labour in its payment bears to the price of provisions, that the happiness of the lower class of people all over the world must necessarily depend. If the price of labour be high, or bear a just proportion to that of provisions, then the bellies of the people will be filled; but, if labour be low and provisions high, then they must be in a miserable state of existence. I am perfectly aware that the price of labour, like that of any other commodity, depends upon the proportion between the demand and the quantity of labour in the market. If we were to suppose that the quantity of labour in the market was great, and the demand limited, then the value of that labour would be comparatively low, whatever the price of provisions might be. This depreciation, however, in the value of labour, depends upon a principle altogether different from the relative proportion between it and provisions. The quantity of labour and demand for it in the market, was supposed to be the same after the petitions of the manufacturers as before; therefore, upon the supposition of there being no variation in these particulars, they conceived, and rightly, that a low price of provisions would be accompanied by a low price of labour. Does not every person know, that the high rate of wages in this country, is in a great measure (I shall not say altogether) owing to the high price of grain and other provisions. *Cæteris paribus*, the one must necessarily fall or rise with the other. Your correspondent's reason for denying a position so very clear is, that, in all countries blessed with a fine climate and plenty of provisions, the people are poor, and that, in climes less fortunate, they are comfortable and happy. Although your correspondent has the authority of Hume, in regard to France, Italy and Spain, he would find, were he to take the trouble of seeking, that the cause lies deeper than what he thinks. Was the genialness of the climate the cause of the poverty of the people, it would act universally, and without exception. But, did not the people of ancient Greece and Rome, successively the masters of the world, inhabit the same countries that their degenerate children now do? The truth is, that plenty has not necessarily any influence over the wealth or poverty of a country, though some rich countries in modern times present a picture of indigence. The true cause of these fine countries being in a state of poverty, is the want of the blessings of freedom; and it is to the possession of these, that

countries naturally barren have become rich and proſperous. It was this invaluable gift that nerved the arm of the ancient Roman, under the heat of a burning ſun; and, to the want of it, is owing the ſupine degeneracy of the preſent race. At both periods, the climate was the ſame, but their political liberty was different; and, ſince there did not exiſt a difference in their moral ſtate, it muſt be owing to the cauſe that was different at theſe two periods, namely, the want of political liberty. The reaſon of the low price of grain not being accompanied by a low price of labour in North America, is owing to there not being a due proportion between the quantity of labour in the market and the demand for it. The quantity of the former is ſmall, and the latter great beyond all former example: for that reaſon, there is low grain and high wages in that extenſive continent. Eſtabliſh, however, that proportion, and a low price of proviſions will inſtantly follow low wages.

The effect of too great a facility of obtaining food in repreſſing induſtry, is ſufficiently apparent, according to your correſpondent, in this country, and particularly in royal burghs. I never knew till this moment, that royal burghs were at all remarkable for the facility with which the burgeſſes provided food for their bodies. On the contrary, I imagined that the inhabitants, ſo far from acquiring their daily bread with eaſe, paſſed a poor, pitiful exiſtence. I ſhould think that royal burghs was but an unhappy example of the *otium eum dignitate.* Their indolence, I rather think, is entirely owing to the baneful influence of politics acting upon a ſmall ſurface. I agree with your correſpondent, that, *cæteris paribus*, the price of labour, like the price of any other commodity, depends entirely upon the proportion between the demand and the quantity in the market, and that, whatever leſſens the demand, muſt lower the price of labour. I do by no means coincide with him, however, in the aſſertion, that a low price of proviſions, by increaſing the facility of living, will decreaſe the quantity of labour in uſe to be brought to market. It often happens, that high wages occaſion a partial diſſipation among the lower claſſes, and affords their maſters a handle for exclaiming againſt their bad effects. But to ſuppoſe that a liberal reward will have the effect of making people work leſs, and that they will labour the more the poorer they are paid, is downright nonſenſe. It is upon the principle of labour being always in proportion to the payment it receives, that what is called piece-work is now ſo much practiſed in this country. Any man of the ſmalleſt experience, knows very well the difference between the daily labour of the man who earns two ſhillings, and that of the labourer by the piece, who makes five ſhillings in the ſame period. With

a few exceptions, which do not affect the general rule, the work is in proportion to the reward, the effect to the cause. 'Man,' says your correspondent most triumphantly, 'is still the same in all countries, and a free importation would occasion such an influx of corn, and such a depreciation in the value of all the necessaries of life, as would assimilate us to the nations of more genial and productive climes, and plunge the nation into a gulf of slothful indigence and misery.' Man is not the same in all countries by any means, unless the circumstances in which he is placed be exactly the same. The cause which is supposed to produce this uniformity must be universal, and act with the same energy throughout, otherwise the monotony cannot hold. Now, the inhabitants of this country are not *in pari casu*, in the same circumstances, with the modern Spaniard; therefore he is not the same animal, as we all know. Thank God, he reaps the fruits of his labour, which the other does not; and therefore, though wallowing in plenty, he does not cease to be industrious. I have the honour to be, &c.

R. M.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

SIR,

WHEN examining some old papers lately, I fell in with the following copy of a letter, wrote in 1783, to the late Andrew Wight, Esquire, at Ormiston, author of the '*Present State of Husbandry in Scotland*,' then in the course of publication. Mr Wight was the first of our Scotch surveyors who took the field to describe the rural practices of this country; was the intimate friend of that singular genius Lord Kames, and recommended by him to the Board of Trustees for the Management of Improvements, &c. in Scotland, as a fit and proper person for executing the business which the trustees had in contemplation. It appears that Mr Wight had requested some information from the author of the letter, on points connected with the work which he then had in hand, and that an opportunity was thereby furnished, of stating some grievances which were thought to bear hard upon a particular class of cultivators, namely, those who cultivated flax for the express purpose of saving the seed. A few years before the period in question, owing to a war with Holland, the demand for flax seed had increased so much, as to cause the attention of many farmers to be directed to the growth of that article; and the trade was not a bad one, owing, in a

great measure, to the premium of one shilling per peck allowed by the trustees on all seed properly saved and fit for sowing. This new branch of farm culture, therefore, increased rapidly; and seed, which excelled that of the Dutch and Baltic importations, was produced in such quantities, as almost to preclude the necessity of further importation, unless in such a degree as might be required to prevent a degeneracy of home produce. In this stage of the business, some regulations adopted by the trustees, threw cold water on the growth of seed, and occasioned almost every farmer to renounce the culture of an article thereby rendered unprofitable. Had the trustees pursued their original system a few years longer, there was every chance that the trade would have soon been put on a solid footing, and that the seed would have established its character, which every person knows to be difficult with a new article. To bring them back to the ground formerly occupied, seems to have been the intention of the person who addressed Mr Wight in the following letter.

I am yours, &c.

ARATOR.

Letter to Andrew Wight Esq., Ormiston, February 7. 1783.

I AM favoured with yours of the 5th current, and would be exceedingly happy to give you any information upon the subject which presently employs your attention, were not my management almost in every respect similar to the common practice of the country; but I embrace the opportunity now offered, of saying a few words on a new branch of husbandry lately adopted by many farmers, and trust that exertions on our behalf will be used, so as the grievances complained of may be remedied.

I have sown flax these four years past, chiefly with a view to save the seed, and, in general, have been well paid for my trouble. There is a great deal of my farm very fit for the culture of this article, especially if seed is the alone object; and had the trustees continued their premiums upon the old plan, I meant to persevere; but now that they are put on a new footing, it is unnecessary for me to sow with any prospect of reaping a halfpenny of aid from the public fund under their management.

My opinion upon flax and flax-seed I shall give you in a few words. I think, in this county (East-Lothian), we should chiefly have seed in view. The crop of flax will often, very often, not pay workmanship. It is so hardened by bringing the seed to maturity, that it is absolutely hurt in quality, and decreased in quantity; and as the seed is the most profitable of the two, it deserves the most attention. I suppose you could be of use to

flax

flax raisers, by proper representation to the trustees upon the subject of their premiums. If flax husbandry was worthy of their fatherly care in its infancy, it consequently deserves a continuance of their regard till it arrive at such a degree of perfection, as to be able to stand upon its own feet. I will venture to say, that if premiums are given in last year's mode, the sowing of flax for seed will be annihilated in a couple of years.

You well know, that the present plan for distributing premiums for seed, is where the competitor raises thirty pecks upon an acre, and even then he is confined to six acres, and can have no claim for more. Now, in general, the average of crops is much below thirty pecks per acre; consequently, very few can hope to participate of this laudable fund.

The county of East-Lothian has, within these few years, raised a very great quantity of seed; and, as it has already been observed, seems much more adapted for raising seed than flax. As a corroborating proof of this opinion, I refer you to the advertisement upon the distribution of premiums for last season, where you will find not one farthing for flax; but, on the other hand, 300l. for seed within this single county.

The ground upon which flax is generally sown, is a light moorish soil, or soft soils free of annual seeds; sometimes after a fallow, and sometimes after oats. Very few people sow it upon good land; and unless it be sown upon rich land, I apprehend weighty strong flax is not to be obtained, though this does not hold with regard to seed. Better crops of seed, in proportion, are got upon the kinds of land above mentioned, than on rich soils when flax is taken for a crop; and certainly this plan deserves approbation, as, according to it, flax is only sown where corn is not expected to be good, and the better land reserved for grain.

Another observation may be made. The climate of this county is better calculated for bringing seed to full perfection than in other parts of Scotland: we have in general warmer weather, much drier, and earlier harvests, than upon the west coasts, and without these the seed is not properly nurtured and ripened. Again, the raw climate and moist soil of other parts of the kingdom, point out where flax will thrive more abundantly.

Upon these principles, I venture to assert that East-Lothian would not only be benefited by the premiums being distributed as formerly, but that the kingdom itself would receive a lasting advantage. We were just approaching the period, when flax growers in general might have been supplied with seed at home without importation; but if assistance is withdrawn, the farmer will find it inconsistent with his interest to raise this commodity; and,

and, as it must be obtained, the country will be drained of large sums to procure it from abroad.

The old premium was one shilling per peck upon any quantity of good seed raised, and no restriction as to the number of pecks upon the acre. If the Trustees' funds cannot admit a continuance of this rate per peck, let it be reduced to 9d., 8d., or even 6d., as circumstances allow. A plan of this nature gives a fair chance to all. According to it, a stimulus, a temptation is afforded to flax raisers for persevering in their trade, notwithstanding of the public assistance being somewhat lessened. I recommend this subject to your attention, and certainly it is of considerable importance to *the present state of husbandry in Scotland.* I am, &c. &c.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

Recipe for Salting Butter, &c.

SIR, *Dovernside, Banffshire, June* 25. 1806.

I HAVE just been reading your receipt for making Dunlop cheese, in your Magazine of November 1803. You there request any of your correspondents to give you information of the best method of making and curing butter. I can only send you an account of what is practised in my dairy. If you think it worth inserting, it is much at your service. I am, your humble servant,

BETTY BUTTER.

The cows are fed upon fine old grass by the river side. The milk is kept in tin plates, and the cream taken off, after standing twenty-four hours. When the weather is cool, the butter is made twice a week; in summer, three times. The churn is a large barrel. One end, to which all the inside work is fixed, comes off, which makes it very easily cleaned.

When the butter is made, if you wish to keep it fresh, beat it well from the milk; then beat it through pickle, and make it up; put it in a deep stone dish, with spring water over it, and put on a cover to keep out the air.

Receipt for Salting Butter.

Wash your butter very clean in a wide deep vessel; beat three drops of saltpetre for each pound; and to half a stone of butter allow half a pound, and half an ounce of common salt; cast on your saltpetre first, and then the salt; put them all on before you

you begin to mix the butter, and then, with the clapper, mix it through as well as possible, and pick out every lump you can find. Let it stand in a stone dish till the next time you churn; do as above, and mix it with the butter in the stone dish; put it all into your kit, and put no pickle on it till the kit is full. Observe always to salt the second churning, and mix it with the first, before it is put into the kit. When full, put strong pickle on it, and a bit of linen to keep out the air.

N. B.—When your salt butter is done, do not clean the kit, but let it stand with any bits of butter that may remain on the sides, and the pickle that is in it, till a few days before you are going to fill it; then clean it well, and rub all the inside of it with salt. If it has stood very long, and the butter been rancid, after cleaning it as above, put in two spadefuls of garden earth; put a cover on it, and let it stand a night; then turn it out, and clean your kit thoroughly before you use it. B. B.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On the Husbandry of Wigtonshire.

Pater ipſe colendi
Haud facilem eſſe viam voluit; primuſque per artem
Movit agros, curis acuens mortalia corda.

VIRGIL.

Father Jove himſelf willed the ways of tillage not to be eaſy, and firſt commanded to cultivate the fields by art, whetting the minds of mortals with cares.

SIR,

AMONGST the many valuable eſſays which have appeared in your Magazine, few have chanced to attract more of my attention than thoſe of your excellent correſpondent Agricola. The diſtinct account of Ayrſhire huſbandry (vol. V. p. 73.) furniſhed by that gentleman, I have repeatedly read with pleaſure and approbation; but, in attempting a ſimilar account of Weſt Galloway or Wigtonſhire, I am afraid, if known, that I would be accuſed of preſumption; for my experience and opportunities of obſervation, to ſay nothing of my defective compoſition, are undoubtedly much inferior to thoſe of Agricola. It is, then, with diffidence that I proceed to deſcribe the huſbandry of this county; but I flatter myſelf that my intentions, at leaſt, will not be blamed or accuſed.

Weſt Galloway or Wigtonſhire, though the moſt ſouthern diſtrict of Scotland, is one of thoſe places conſidered as remote from the centre of intelligence and refinement. Surrounded on three ſides by the ſea, its ſituation is much inſulated, and placed

at

at a distance from examples of improvement. It long remained neglected, after considerable advances had been made in other districts of this ancient kingdom. The feudal spirit long continued to influence the proprietors; and perhaps it has not yet wholly ceased attempting to display its symptoms amongst some of their heirs and descendants.

This shire is said to contain a surface of 469 square miles, or 238,721 Scotish acres. It abounds with little hills, but has no mountains; and though it may be certainly called a low lying country, yet the surface is greatly broken, and very irregular. I cannot pretend to say what proportion of this surface is arable; it is perhaps not two thirds of the whole; but a considerable proportion might be rendered arable, which does not at present come under that description.

It is a well known fact, that the southern and western coasts of Scotland have a climate more moist than the eastern coasts. The vapours wafted from the Atlantic Ocean, here descend in frequent damps and rains, and may be considered as expending themselves before they arrive upon the eastern side of the island. Wigtonshire is perhaps less liable to this excess of moisture than the tracts of country extending to the north, which are in many places mountainous, attracting and arresting the vapours and clouds which accumulate amongst those more elevated regions; yet an idea prevails, that the climate of this district is unfriendly to the growth of barley and wheat, especially the latter. How far this is well founded, I will not pretend to determine; but I suspect the belief does not wholly rest upon fair and impartial observation and experiment. Indeed, upon heavy clay soils, and low tracts liable to be injured by excess of humidity, the operations of the husbandman are greatly interrupted in the winter season, by frequent falls of rain, whilst the soil seldom receives much amelioration from the influence of frost, as frost of many days successive continuance in Wigtonshire, is what rarely occurs. Here, it freezes and thaws, thaws and freezes in rapid succession.

The spring is much retarded by cold easterly winds, which often prevail in this season; and, at this time, stock are apt to suffer most severely; for it is not here, as in some other districts, where the chief object is, to fall upon means of converting the straw into manure. In Wigtonshire, both straw and hay are often barely sufficient to support the farmer's black cattle and horses; and spring is the critical period when fodder grows scarce, before the pastures become useful. These serious inconveniences are no doubt much alleviated, by adopting an improved system, whereby a succession of green or succulent food

may

may be provided throughout the whole year; and it is matter of serious regret, that this has not hitherto been more universal.

There is, however, one fortunate property in our climate, peculiarly observable in autumn; that is, rain is generally followed by wind, which, though it may occasionally shake the standing corn, yet prevents any serious damage from befalling that part which is cut down. Thus, nicety of stacking is by no means necessary, and as little practised; for corn can be often safely stacked or housed the second day after a heavy fall of rain.

The soil throughout this county is a good deal diversified; but by much the greater part is a shallow, brown, hazel earth, incumbent on different kinds of subsoil, though much of the subsoil consists of gravel. There are considerable tracts of reclaimed moors, the greater part of which are incumbent upon subsoils retentive of moisture; consequently less genial to the growth of turnips, and other ameliorating crops.

No coal or limestone having been hitherto found within this county, these essential articles are imported; and though there are large tracts of moss, yet, in several situations, fuel of this kind is both scarce and distant, so that coal must be had recourse to. Marl has been found in several parts, but is now much exhausted.

As nearly as I can learn, marling of land came into practice about forty years ago, and liming commenced several years afterwards; so that it is only from this period we can date any thing resembling improvement in Wigtonshire farming. But the sinews of war were wanting, for there was almost no capital in the country.

The landlords themselves were blinded by dissipation and prejudice; and what could be expected from a poor and unassisted tenantry? The great effects of lime and marl, however, when applied to the soil, excited many individuals to unusual efforts; and they found their industry amply rewarded. But the landlords, who seem to have studied any thing but their own interest, shut their eyes to all consequences, and in many instances allowed the tenants to persevere in scourging the land with white crops in succession, until the soil was nearly reduced to a *caput mortuum*. The tenants, solicitous to acquire wealth by what they thought the speediest and surest means, reflected not upon the injury they were occasioning; but, with a stupid, uncontrouled avarice, they hastened to rob the soil.

I believe something similar to this has happened in many other districts; therefore the opprobrium of such injudicious management is not peculiar to Wigtonshire; yet, seeing the ruinous effects such proceedings have produced, we now contemplate these effects

effects with feelings of warm disapprobation; and are endeavouring, in many instances, to repair the evil, a work not easily accomplished.

About 30 years ago, smuggling established itself with a boldness in this quarter, that one can now scarcely imagine could be possible in a country under a settled state of government. The business was carried on long before, upon a more limited scale, with the Isle of Man, the proximity of which, together with the separate laws and government it was under, held forth a strong temptation to a people who were not accustomed to any regular habits of industry and useful employment; and, indeed, there are still some respectable individuals amongst us, who laid the foundation of their fortunes in their little adventures to and from the Isle of Man.

The trade, however, at length assumed a more general character, and became so extensive in its operation, that government felt the necessity of adopting strong measures to suppress it, which they certainly accomplished, and many of the adventurers were involved in ruin. Both in the moral and natural world, however, we see good frequently proceeding from evil; and this was, in some measure, the case with smuggling; for it not only taught the people to exert themselves, but introduced a temporary capital into the country, with which several useful improvements were effected, decent houses built, good horses purchased, and the general system of the district, in many instances, considerably amended. It promoted an intercourse with other parts, and taught the Gallovideans, that if illicit trade should fail, never to revive, they might, nevertheless, find employment in the end more profitable, and much less subject to risk and danger.

The Wild Scot of Galloway was formerly proverbial. Inhabiting a country supposed by people at a distance to be barren and inaccessible, he was in a great measure secluded from the world; but the case is now changed, and a free intercourse with the kingdom at large, is fast abolishing provincial distinctions.

Much, however, remains to be effected before this county attain those beneficial alterations which it still requires, and assume that value and importance which it might claim on account of its natural and local advantages.

As Port-Patrick is situated in this county, from and to which packets and other vessels regularly pass to and from Donaghadee in Ireland, Irish people are arriving amongst us continually. By this means we are never scarce of labourers, though the dissolute and immoral manners of these people are apt to render us jealous and distrustful of srangers. It is not to be supposed that people of the

the best description come over to us, though still we occasionally discover honesty in Irishmen. These observations only apply to the lower ranks; for the better informed people of Ireland are well disposed and amiable.

The Irish labourers, however, are by no means proficients in every kind of farm-work; for, at home, the pick, spade, and shovel, are the implements they chiefly employ. Their crofts, which are there called farms, occupy so large a proportion of the country, that examples of decent well managed farms are rather rare to be met with. Some of the young men, however, who come over to us, when they happen to enter into the employment of judicious husbandmen, become, with perseverance, expert and useful, even in managing horses, and supply the place of our own natives, who, from a spirit of independence and adventure, betake themselves to employments and professions which they esteem superior to the cultivation of the soil.

In obtaining the favour of our young women, too, the Irish are particularly successful; and though that favour is sometimes too hastily conferred, yet, upon the whole, these connexions are useful to the country, seeing, but for Irishmen, many of our women would, of necessity, live and die unmarried, which could be reckoned nothing less than a serious national evil. Thus our lower ranks are a mixed race; and it must be confessed they do not yet exhibit that correctness of morals, persevering industry, and proficiency of duty, which eminently distinguish the same important class of society in some other more improved districts.

From farm-servants I might naturally proceed to describe their masters, a class of people too long neglected by their superiors, and by your pretended men of the world; though at same time a class which constitutes, perhaps, the most essential link in that chain which connects the various orders of society in a prosperous and well regulated state. Here allow me to make a digression.

In your second volume, page 12, a correspondent in Ayrshire, makes the following observation. "The writer of this paper has often discovered, from observation and experience, that the common farmers in the west of Scotland, are generally unacquainted with theoretical knowledge of farming; and from hard labour, straitened circumstances, and contracted prejudices, they only move and perform as they are impelled, like a machine or implement of husbandry."

How far this degrading picture of the west country farmers may be applicable to those of Ayrshire, I will not pretend to determine. I am disposed to think the remark harsh, and the description overstrained; but I shall go backward to the 287th page of your first volume, and quote a very opposite description of

of the farmers of Fifeshire, taken from the agricultural survey of that county.

"From the progressive improvements in the science and practice of agriculture, which have been going forward during the last 20 or 30 years, the condition and circumstances of the farmers have experienced gradual alteration for the better. And their growing affluence, cooperating with the general progress of luxury and refinement through the nation, have had a very visible effect upon their manners and habits of life. Formerly, it was customary for the farmers to subject themselves to every kind of drudgery and hard labour, undergoing the same toil, and often eating at the same table with their servants. And in some instances this may be the case still, especially where their farms are small, their circumstances narrow, their rents high, and, consequently, cannot afford to exempt the master from personal labour. But many of the farmers now occupy a more respectable and important station. Their chief business is to superintend. The operative and servile part is committed to others; but the master's presence and direction are every where to conduct and forward the various necessary operations, in every department, and in their proper season. These requisite attentions, together with the business of the counting-room, and his attendance on markets, for the disposal of his grain and cattle, a province which he usually reserves to himself, will afford little time for relaxation or idleness, and are surely much more conducive to his interest than holding the plough, thrashing the grain, or filling and driving his own dung cart.

"The alteration in their style and manner of living is equally remarkable. Their houses, in general, are decently and substantially furnished, and the apartments so arranged, and the general economy of the house so regulated, as to produce a more marked distinction between master and servants, and to put an end to that indiscriminate intercourse, in respect of sitting and eating, which was common in former times. Though many of them continue to be supplied with necessary maintenance from the produce of their farms, and to be clothed with their own manufactures, there are few who do not indulge more or less in the luxuries of life. Butcher meat is much commoner now than formerly; and their Sunday's dress at least is furnished from the shop."

In a general sense, neither of these descriptions will strictly apply to the farmers of Wigtonshire. They may be said to hold a sort of intermediate station, though the above sketches are descriptive of several individual instances.

From what has been said, it may be safely inferred that, till lately,

lately, the tenantry of this district were poor and oppressed; and it is not long since the whole tenantry of Scotland were in a similar condition: but here our progress did not commence so soon, nor has it been equally rapid as that of more favoured districts. At this very time, however, a race of farmers are making their appearance in the country, who have refused to be shackled by the trammels of prejudice and ignorance which enslaved their fathers, and display an anxiety to adopt a system better calculated for their own comfort and advantage. To support and encourage these, ought to be the chief object of proprietors; and some of them have shewn that they are sensible of the expediency of doing so; but the great error generally committed, is that of adopting the plan which gives the greatest immediate rent, without subjecting them to any part of the expense they can possibly avoid of substantial and costly improvements. The reluctance exhibited on this head is at present the great cause of the improvement of the country being retarded; for without commodious farm-buildings, and sufficient fences and enclosures, it is absurdity to expect a decent and thriving tenantry; and it is only by such that judicious husbandry will be executed.

In districts where capital is by no means abundant, and where an active skilful tenant can seldom be procured with a capital equal to a considerable undertaking, it is exceedingly obvious, that unless the proprietor lend a helping hand, improvements must either go on very slowly, or not at all. When on this subject, I cannot help feeling anxious that proprietors, who are so very sparing of their encouragement, would be prevailed on attentively to peruse the prize essays in your 26th Number, upon the introduction of improvements into the Highlands; for many of the solid arguments therein adduced apply forcibly to the present state of this very county. Were the country occupied by enterprising tenants, who possessed sufficient capital, there would be less necessity for advances upon the part of proprietors; for tenants could then accomplish the desireable work with less of their landlord's assistance. If the speculation afford a proper interest for capital employed, and at same time defray the expense of management, including a premium for the risk, it may be as good for the tenant to employ it as not; and he makes his calculations accordingly.

This parsimony on the part of proprietors, like avarice in general, frustrates its own purposes; for the improvement of their estates, in place of going briskly forward, languishes under the puny efforts of men who are destitute of the means and qualifications of pushing forward with vigour and judgment. Their

time is often occupied, more or less, for years, in the erection of temporary hovels, in place of substantial and commodious farm-buildings, which ought either solely to be erected at the landlord's expense, or such allowances made by him as would effectually enable the tenant to accomplish this most necessary undertaking at his very outset. Thus, his means would not be dissipated and his time sacrificed in constructing half useless huts, to the disgrace of the country, and the ruin of his own interest.

Perhaps the most amusing paper that has yet appeared in your Magazine, is that which opens your 20th Number, viz. volume Fifth, entituled, 'Comparative view of Farmers fifty years ago, and at the present day,' &c.

Here, in treating of the farmers of East Lothian, a district where capital is abundant, and good management almost universal, page 399, the shrewd and humorous writer observes,—'The farm-houses are neat and clean; some of them handsome boxes, elegantly furnished. Unquestionably, the best farm-houses in the county have been built by tenants at their own expense, with the spirit of proprietors, though, perhaps, indeed, with more taste than prudence.

'The hinds' houses and cottages have shared in the general improvement. Instead of abominable, stinking, nasty hovels, which they were in the beginning of my time, without a chimney, and a bit of sieve and yolk of glass, to admit the fresh air, and the light by day, and an old bonnet stuffed with straw to keep them out, they are now pleasant cheerful habitations, with casement windows of a proper size.

'The stables, Good G—! how often have I been alarmed and frightened out of my sleep by the fighting and screaming of a dozen of horses standing loose in the same undivided stable, and the responses of the courser thundering in his travise in the byre beyond the partition! I sicken at the recollection of the byre, and turn from it with disgust.

'The economy of their families and their modes of living are changed greatly for the better. Farmers here have been long on this side of that sorry mess on which the poor husbandman subsists in many other counties, and that ham and egg dinner, and rarely a fowl, on which he regales a friend. Their larders are regularly and well supplied.'

The intelligent communication from which this quotation is made, appears more adapted for amusement than utility, and receives an admirable answer in the following Number, viz. volume Sixth, p. 57. Amongst the concluding inferences of the former paper, farmers are stated as 'the most thriving class of society, and those of East Lothian the most thriving of that class;' upon which

which it is judiciously observed by the respondent, that if this is really the case, another 'legitimate inference is, that land, notwithstanding the high value of labour, and increased and increasing amount of public burdens, is still under-rented.'

The respondent goes on to state, that such representations may be used by many in a mischievous way. 'Landed proprietors may view the ground as under-rented, therefore attempt to screw up their demands to a pitch that may ruin cultivators altogether, whilst the purchasers of farm-produce may be led to infer that its articles are too high, and that prices ought to be diminished.'

I am aware that frequent quotations are apt to tire the reader, but as all knowledge is founded on comparison, and as a little industry may now find out many appropriate passages among your former publications, I choose not to become a plagiarist, but avowedly and honestly to produce the arguments and illustrations of others, who appear so well qualified to elucidate the rural economy of the times.

That large farms are most beneficial, both to the individuals directly interested, and to the public, is now a fact, proved beyond a single remaining doubt. Upon this point, your past Numbers contain many forcible statements, and unanswerable arguments. Besides, in the districts best cultivated, experience has fairly and undeniably determined the question. Yet the size of farms ought still to be regulated by the extent of capital to be employed by the farmer, and the nature and extent of encouragement given by the proprietor. In Wigtonshire, where capital is scarce, farmers perhaps ought not to venture upon so extensive a farm as would be most advantageous under different circumstances; and, for the same reason, proprietors who are in earnest in wishing to improve their estates, ought to assist the exertions of the farmer, and endeavour to render his situation comfortable.

That mutual jealousy of parties which we have too frequently witnessed, should be forgot for ever, and succeeded by the liberal motives of mutual advantage. I again resort to another quotation, illustrative of these important considerations. In the answer to the Comparative View above mentioned, the following excellent remarks are made.

'In former times, say 40 or 50 years ago, farming in East-Lothian was generally carried on upon a small scale. The size of farms rarely exceeded 200 acres, and these were generally laboured by eight or twelve horses, yoked in two or three ploughs. The implements of husbandry then used, were not numerous, and of a plain and simple construction, cheaply purchased in the

first instance, and easily repaired afterwards. As the profits from farming ought to be, and generally are, proportionable to the extent of capital stock employed, the cultivators of former times neither received, nor did they expect, a great return from their respective undertakings. They lived in a confined and contracted sphere, joined little in society, and seldom stepped beyond the limits of their several possessions. Their outlays were not great, but their incomes were proportionally small.

'Some of the causes why farmers, at the present day, are entitled to greater profits than their predecessors, are the following.

'The capital stock necessary for carrying on improved husbandry, as already said, is tripled in some cases, and quadrupled in others, which is of itself a good cause; but a better one may still be found in the increased size of farms, a practice which has of late extensively taken place in this district. This increased size has occasioned capital stocks to be put into action, the very interest of which would have enabled the owners to live comfortably, even had they bound up their talents in a napkin. Are not such people entitled to every comfort that life can afford? And have they not a valid claim to the possession of good houses, well stored larders, and, in short, to every thing enjoyed by the merchant and manufacturer? Surely they have; and those who would, either directly or indirectly, attempt to limit their comforts, or to deprive them of their stock, are neither friends to private right, nor to the improvement of the country. If farming, whatever circumstances occasion such a revolution, is reduced to a condition which deprives the owner of a suitable recompense, capital stock will run into other channels; and improvements, from the inability of the occupiers, will cease to be undertaken, far less to be successfully executed.

'If we turn our eyes over the district, and contemplate what has been done of late years towards its improvement, few doubts will remain as to the advantages derived from capitalists embarking in rural undertakings. Such may be considered as having received a liberal education—as free from prejudice, the bane of improvement—as disposed to introduce new practices, and enjoying the fullest opportunites of acquiring knowledge in every branch of rural art. Possessed of sufficient stock, they are able to go through with every practicable plan; and even should such not altogether succeed, material injury will not be sustained by them from a partial failure. When persons of this description embark in rural undertakings, proprietors of land have cause to rejoice. Good houses are built—enclosures reared—waste land cultivated—morasses drained, and meliorations of every kind executed, much

to

to the benefit of the property in all time coming, but especially when the lease, under which they are executed, arrives at a conclusion.' Respecting what is said of the improvement of farm houses, it is further observed. 'How can small or poor tenants ornament and improve extensively, when such things are inconsistent with their state and circumstances? According to the rate of modern rents, a small tenant can do little more than procure subsistence for himself and family, therefore is entirely incapable of executing substantial improvements. To expect that he would build an elegant house, would be highly unreasonable; and yet instances are not unfrequent of tenants of a different description, upon leases not exceeding 21 years, having expended 400l. or 500l. in erecting a house, which is neither more nor less than paying a rent of forty pounds, or upwards, for family accommodation.'

As these passages are so very appropriate, I hope I shall not be blamed by any candid reader for copying them so much at length. I know they are the observations of men who are well qualified to elucidate such subjects; and, by perusing them, the good people of Wigtonshire may form some judgement how far their district is behind in opulence and improved husbandry, when compared with one of our pattern counties. It may be naturally inquired, whence arose this great superiority of capital amongst the cultivators of East-Lothian?

An East-Lothian man will best answer the question; but I presume, generally, that it has arisen from the more early introduction of improvements—the more liberal system of connexion betwixt landlord and tenant—the prosperity of the times, and the great and various local advantages which East-Lothian possesses.

If in Wigtonshire we are nearly half a century behind, we must account for it in the more recent introduction of improvements—the comparative remoteness of our situation—the want of spirit amongst our landlords, and the barbarous remains of the feudal system, which are not wholly obliterated, even in the present day.

The size of farms in Wigtonshire is various. It may be stated from 400 acres of arable land, down to 50. With me, it is a favourite maxim, that a small farm, well managed, is more beneficial, both for the parties and the public, than a large farm ill managed. Nevertheless, my sentiments are, what I have already expressed upon this subject in general. Here we frequently observe, that the extensive farmer is the most indolent, even when possessed of capital sufficient for what ought to answer his purpose. But this seems to arise from his early habits of life,

which have misled his judgement, and confirmed his prejudices.

It is therefore hoped that such perversity and slothfulness will descend to the grave with the persons who possess these injurious qualities, and that they will not again rise to interrupt the salutary progress of improvement.

Where industry and capital are to be found united in the same individual, proprietors are to blame in not making him an object of selection. His premises should be in proportion to his judgement, capital and activity, and should increase as these increase. Thus a respectable tenantry would in time be obtained, and the smaller farms would gradually be incorporated with the larger. People destitute of capital and agricultural knowledge, should gradually be removed, in order to make way for a more useful set of men, not by any oppressive or severe means, but by gentle and progressive steps.

This subject is entitled to the most serious consideration of proprietors; for a proper selection of tenants, and a due proportion of encouragement given to them, would more effectually promote the interests of landlords, than all the silly shifts and avaricious plans, which they too frequently and too successfully put in practice to increase their rents.

It must be admitted, that rents have increased far beyond the most sanguine calculations; and when they are to arrive at their ultimate stretch, or highest pitch, is at present wholly problematical.

Avarice is one of those depraved qualities of the human mind, which knows no limits; and whilst there is a shadow of possibility that land *may* pay, tenants, if they have any capital remaining, will be ready to embark in new speculations; but there is certainly a danger more than imaginary, to be apprehended, that if rents continue to advance, whilst the price of labour, public burdens, and the value of wood and iron, &c. continue to advance in a similar proportion, farmers will be deprived of whatever capital they may have accumulated, and fall back into their former condition of poverty and wretchedness.

Something similar to this is already said to have happened in Scotland, upon the accession of James the VIth to the throne of England, 'which was in a great measure owing to the increased luxury of the landed interest requiring an augmentation of rents.'

Similar causes will generally produce similar effects, and there is nothing improbable in the supposition that these causes may again operate.

In the highly instructive compilation made by the Rev. Adam Dickson, upon the agriculture of the ancients, a forced increase

of

of rents is stated to have been actively instrumental in occasioning the decline of agriculture amongst the Romans.

It is there said, that 'the proprietors of land had crept within the walls of the city, and having abandoned the heck and the plough, choosed rather to employ themselves in the theatre and circus, than in the cornfields and vineyards. Or, perhaps, in want of money to answer the demands of luxury, raised all they could by oppression, without regard to futurity.' Again, the same respectable author thus expresses himself. 'While farmers are in an independent and flourishing condition, it may be expected that real improvements will be further extended; but when rents are raised to such a height as to distress and discourage the farmer; when landholders, in consequence of this, farm large tracts of land themselves, then Britain will teach posterity, as the Roman state teaches the present age, this important lesson, *That agriculture declines as well as other arts, and that this must happen whenever it falls into the hands of persons who, either from their education, cannot acquire a proper knowledge of it, or from their station, cannot give proper attention to it. That, in consequence of this, the price of provisions must rise, and continue high, till such time as the decline of trade and manufactures, and the decrease of riches, reduce the demand so low, as to be fully answered by the scanty crops produced.*'

To let a farm to a poor and ignorant man, is to bring him into a situation of complete slavery during the currency of his lease. It were better for him and the public, that he should at once become a labourer in the employment of other people; he would then enjoy more real comfort and independence.

It has been one of the misfortunes of this county, that farmers have not, till of late, received what may be called a decent education. Another evil has also been prevalent, and landlords should use their influence to prevent it. This is, that farmers of very limited knowledge and capital, have frequently committed the error of bringing up several of their sons to their own profession.

An abusive idea has prevailed, that it was beneficial for a farmer to have a family able and willing to work his farm; and it has been supposed he thereby saved, in a great measure, the wages paid by others to labourers and farm servants.

Such doctrine is very well adapted for America, or any new settled country, where the wages of labour is intolerably high, population extremely thin, and circulating capital exceedingly small. It becomes then a matter of necessity, and a man's wealth essentially consists in the number of his family. But in a country fully peopled, where young men have the choice of so

many professions, if their parents intend that they should ever rise to any thing like independence and respectability in the world, they cannot more effectually prevent the accomplishment of their wishes, than by keeping their sons drudging by threes and fours at home.

What is the consequence? The labour they perform is often neither so regular nor so productive as that of well trained servants. They possess a false spirit of independence, and are destitute of the means to support it. Little progress is made in knowledge and refinement; and the plan is productive of family dissensions. They lead the insipid lives of expectants, until the best of their days are past; and, besides all other ill consequences, the state is deprived of the more useful services they might perform in other professions.

The capital required to settle a farmer comfortably, is now become so considerable, that many farmers in this quarter should not think of bringing up more than one son to the profession, and but a small proportion should think of more than two.

The young farmer should always receive a decent, and, even if practicable, a liberal education. To be a drudge, is not to be a farmer—I hate all such narrow sentiments. He should be made acquainted more or less with science and the world;—I repeat, that a farmer should not be a slave.

We now see young men intended for trade and manufactures finish their education in the capital; and to give the farmer the same advantages, would be to confer additional respectability upon the profession, placing him more upon a level with the better informed orders of society, to which he certainly has a valid claim; but in times past, the boy of spirit and education has gone away into another profession; and agriculture, alas! the first of all arts, has been too frequently left in the hands of the vulgar.

The idea, then, so long and so unhappily entertained, of a tenant working his farm with his own family, cannot be too much or too quickly exploded. It is productive of real misfortune to families, and loss to the state.

The terms and conditions upon which farms are let in this county, are often prejudicial to good husbandry. The old plan was, I believe, pretty general throughout Scotland, viz. that the outfield land should give three crops, and then rest six years. This useless system is now falling fast into desuetude, and another system is coming into practice, more consistent with the rules of good husbandry.

Oats are still the general crop; but wheat, bear, and barley, are also raised in considerable perfection. Drilled beans are to

be

be found in several farms, and the growth of turnips is extended, but by no means so universal as could be wished. Summer-fallow is also pretty common, and fields are sown out in clean and good condition. Ryegrass, clover, and improved pastures, are to be seen in many directions; but still, though we are not without many instances, individually, of good management, our general practices are defective.

Proprietors sometimes show themselves over anxious in enforcing the observance of restrictions; which injure the tenant, without benefiting themselves.

In the paper to which I have alluded in my outset, the following remark is to be found, and I confess that I am disposed to subscribe to the sense and meaning it conveys. 'Though restrictive clauses in leases, which fetter the hands of tenants, and prevent them from cultivating the ground to the best advantage, cannot be too much reprobated in an advanced and enlightened state of agriculture, yet when tenants are ignorant, and comparatively poor, it is problematical, if it is not wise and prudent, both for proprietors and tenants, to bind them down for a time to follow a certain plan.'

When a farmer, however, understands his own interest, such restrictions are in a great measure unnecessary, and sometimes prove injurious. This point has been amply and unanswerably discussed in various Numbers of your Magazine, from one of which, Vol. II. p. 200, I shall copy a single passage.

'Perhaps a few protecting clauses are necessary, during the last four years, so as the farm may not be thrown out of shape: for a longer time they are altogether unnecessary,—serving only to fetter the tenant, without benefiting the proprietor; the truth of which may be ascertained by an appeal to the condition of every district where discretionary management is permitted.'

Much of the soil of Wigtonshire being of a light quality, requires to be frequently laid out into grass. Upon farms, all, or nearly all, arable, the proportion has usually been one third under white crop, and two thirds in pasture, hay, green crop and fallow. Experience has shown that these are good proportions; but as proprietors and their advisers are apt sometimes to overrate their own sagacity, some of them have been pretending that the proportion under white crop should be limited to a fourth instead of a third, which I am disposed to believe can answer no good purpose as a general regulation on any soil.

Nothing is more disgraceful in this district than the continuance of *baillie-work*, as it is called, or predial services. These are still taken in kind by several proprietors, who are otherwise tolerable landlords. What can be more applicable to this, than the

the observation of the truly worthy and respectable Mr Dempster of Dunnichen, recorded in his own words, Vol. IV. p. 126. 'There never was a less successful apostle than I have been. In a mission of forty years, I cannot boast of one convert. I still find the tenants of my nearest neighbours, and my best friends, cutting down the laird's corn, while their own crops are imperiously calling for their sickles.'

A few kane hens, chickens and eggs may be imposed. There is something more ridiculous than oppressive in the exaction; but ploughing and harrowing, cutting and leading of peats, and, above all, shearing, are nothing but the remains of barbarism, and would be exacted by few good men, whose minds were not biassed by the feudal notions of their ancestors.

A Mr Webster of Perthshire, was employed under the Board of Agriculture, to survey the stewartry of Kirkcudbright and shire of Wigton. His report was published in 1794, and certainly conveys a low idea of Galloway husbandry. Since his time, however, many beneficial alterations have been effected, and individual instances of judicious farming are much more frequent.

Mr Webster seems to have wrote hastily, and without having obtained correct information upon all the points he mentions; yet, upon the whole, his Report does not appear to me to have deserved the unqualified censure and dislike which I recollect to have heard expressed against it. This acknowledgement is due from a Gallovidean, who endeavours to divest himself of prejudice, and whose mind has been early impressed with a sacred regard for truth.

This county is usually understood to consist of three divisions; these are called the Rinns (or Rhins), the Moors, and the Machers. In the latter division improvements first commenced; and there the soil seems to have been first divested of its fertility by excessive cropping. Similar blunders have been committed in the Rinns, but perhaps not to the same comparative extent.

The moors seem, for the most part, to be condemned by nature to perpetual sterility, and have, from time immemorial, been chiefly stocked with the small black-faced sheep, common in other wild and unfertile tracts. These animals are well adapted for the situation; but it is supposed, that, upon several farms, the wool, at least, might be considerably improved.

In the Rinns, an Agricultural or Farmer Society was established chiefly by the tenantry, in the year 1798; and in the Machers another was established, about two years afterwards. Such societies can seldom come up to the expectations of their founders

yet

yet they are frequently productive of good, particularly in exciting a spirit of inquiry and emulation among the tenantry. In this respect, the societies mentioned have been actively instrumental. They have also instituted ploughing matches, which have been found exceedingly useful in the district. They have at present a market in contemplation at the town of Newton-stewart, for sheep and wool; and they have already established markets for black cattle and horses. Upon the whole, they have perhaps done, and are doing, all that is practicable, considering the partial support obtained from proprietors.

Mr Webster mentions, that in consequence of the dissolution of the Agricultural Society once established at Dumfries, and comprehending the noblemen and gentlemen of Galloway and Dumfries-shire, together with the causes which produced that dissolution, the agriculture of the country declined, and there was afterwards a visible falling off in the breed of cattle.

I have had no opportunity, enabling me either to acquiesce in, or contradict this statement; but I am now happy to observe, that agriculture in this county has of late made considerable advances, notwithstanding the many obstacles with which it has had to contend; and, that the breed of cattle is improving, is beyond all doubt.

The Galloway cattle have been long famous. They are well proportioned and handsome, and excellently adapted for the keeping and the climate. They are always in great demand at the English market, and thither they are mostly sent. Indeed, breeding and grazing of cattle may be called the chief object of Wigtonshire farming, and tillage reckoned as subservient to that object.

Though cattle do not pay by any means equal to the returns made by sheep in Northumberland, Berwickshire, &c.; yet it is highly questionable how far it would answer a good purpose to introduce an improved breed of sheep extensively in this district. The great distance from market would render their disposal precarious and critical. Besides, from various trials made of the New Leicester breed, upon a small scale, the lambs seem to be scarcely able to stand our climate in the spring. Cheviots have been some time introduced, and seem to succeed upon any thing of decent sheep walks. How far they might answer to supplant the native breed of the moors, is rather uncertain. A few Spanish have also been tried some time ago; but with their success I am unacquainted.

Turnips are above all things useful to young cattle; but as they must be drawn off the land, the ground does not receive that rich improvement obtained by feeding off with sheep. Indeed,

Indeed, the succeeding crop after turnips is often very precarious with us; and this has cooled several farmers from an extensive cultivation of this valuable root. Errors I have seen in management, which no doubt led to this failure; such as sowing turnips on improper soils, poaching in winter, and ill-timed or defective preparation in spring; yet, upon the whole, our crops are generally superior, after potatoes, to what they are after turnips, though some few individuals obstinately contend, that potatoes are more injurious to the soil; and even a proprietor or two have gone the length of prescribing limits to the cultivation of potatoes upon their estates; a restriction which I conceive absurdly unnecessary.

Various crosses have been attempted, by different individuals, with the Galloway cattle and other breeds. It is now difficult to say how far these crosses have proved advantageous, the progeny being so much blended with the native and original breed of the country; but the best judges seem to be of opinion, that further crossing would be no improvement. A very considerable proportion of the cattle of this county, at present, is abused, in place of being improved, by crossing, particularly with the Irish and Ayrshire, or Kylo breeds.

The Earl of Galloway, whose exertions in practical farming are very extensive and highly meritorious, has for some time past kept a stock of seventy Galloway cows, of the most approved description; and though he formerly practised crossing, I understand it is now avoided; the most judicious dealers giving a decided preference to the genuine Galloway stock.

Dairies have been lately introduced amongst us, chiefly by some farmers from Ayrshire; and, from what is told of their profits, they must exceed what can be made by breeding. The cows used for the dairy are brought mostly from Ayrshire, and few of the calves are reared. In every situation, however, dairies will not succeed; and the people of Galloway are not only unacquainted with this species of management, but also extremely averse to the idea of giving up their favourite native stock. The Galloway cows have never been reckoned great milkers; but, in this respect, proper attention has not yet been used in selecting the breeders and keeping cows; a good looking animal having been invariably preferred to a good milker, if the latter was otherwise inferior; but, I apprehend, the different qualities might, with perseverance, be found united in the same individual animal; and indeed, by some, it has been nearly effected. One instance I can give directly in point; and this is, that the handsomest cow among Lord Galloway's seventy is, if not the very best, at least among the best, milkers of the whole number.

The

The next requisite improvement is, to teach the calves to drink, or to be hand-fed, in place of the slovenly and prejudicial mode of suckling them. When I mention this, I know that the general opinion of the farmers of this county is against me; but I also know that their opinion is erroneous, and founded on habit and prejudice. They strenuously argue, that the young cattle are not equally good when fed as when suckled; and, with slovenly management and stinted keeping, I readily believe they are right; but, when plentiful keeping and regular attention is bestowed, I can speak from the conviction arising both from experience and observation, that as good cattle may be reared the one way as the other.

Besides, the advantages of feeding are great and various. The cows are at their ease, and continue longer in milk. The calves are turned off at pleasure; and, by these means, a combination may be formed of the breeding and dairy systems. Upon this subject, I am disposed to use more arguments; but I have already run to a greater length than I intended at my outset.

Before concluding, I shall say a few words upon proprietors. Much of what I have already said is applicable to many districts besides Wigtonshire, and partly applicable to agriculture in general; for your miscellany is favourable to latitude of observation; so, what I shall now say is applicable to proprietors of land in general, and not to be understood as confined to those of a single district.

The independent proprietor occupies a most enviable situation. Born, for the most part, to the possession of honour and fortune, he receives a liberal and elegant education, entitling him to the respect of the highest talents and learning of his country, and the best enjoyments of a gentleman. The value of his fortune is rapidly enhanced by the internal prosperity of the state; and the money he chooses to expend upon ornamenting and improving his property, is not laid out with the uncertainty of speculation in commerce, but makes sure and ample returns. He is the natural guardian of the rights of the people, and the protector of the injured and the helpless.

If we see these high advantages so frequently abused, we cannot avoid severely blaming the man who disregards and abuses them. When we see him actuated by jealousy, and a spirit of oppression to his unoffending inferiors and dependants, we regard him as a fool or a tyrant, who is utterly undeserving of the dignified station he holds. But I am never disposed to reprobate, in general language, any particular class of men; for, in every class, good and bad are to be found. I endeavour to account for the depravity of individuals by the common corruption of human nature,

nature, to which some appear as rising superior; so, amongst proprietors of land, as well as amongst other classes, the amiable character of the individual is distinguished by the approbation of the good and the wise. 'One will smile upon the arts, and lead rural industry by the hand; whilst another casts a damp upon the honest heart by oppression, and clips the wings of rising genius.'

These remarks have been collected and arranged with little or no regard to the late important roup of Baldoon estate, and other farms belonging to the Earl of Galloway. I understand that the chief particulars respecting that roup have been already transmitted to you.

We may speedily expect to see improvements going on upon these lands with a greater degree of celerity, and to a greater extent than we have ever yet witnessed within this county. The conditions of management, and the allowances to be made for houses and fences, are, upon the whole, pretty liberal; but the leases should have been at least two years longer than nineteen, considering the very disordered state of the farms at entry, and the magnitude of the improvements required.

Were it not that I have already exceeded the limits usually allowed for a single paper, I might proceed to particularize some instances of judicious management practised by our most spirited proprietors and tenants; but upon this I cannot think myself at liberty to enter at present. Were I to perceive that this communication is well received, and obtains approbation, I might afterwards presume upon another, still further illustrative of the rural economy and agricultural interests of Wigtonshire, for which, I apprehend, materials sufficient might be found. But, in the mean time, I shall remain diffident of my success; and, with a continuance of respect, am yours, &c.

Wigtonshire, Sept. 1806. AGRICOLA JUNIOR.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On the Management of Thin Soils incumbent upon a Retentive Bottom.

SIR,

IT has often appeared to me, that though your periodical work contains many excellent hints and observations respecting the management of arable land, yet, the general bias and inclination of such being disposed for good soils, or those calculated for carrying wheat, that something was required wherein the best practice

tice on thin clay soils, and those mixed with peat earth, might be satisfactorily elucidated. I do not take it upon me to say, that what I am now going to state will expressly answer that purpose; but, being founded upon practice gathered during a period of no shorter duration than twenty-five years, cannot be altogether unworthy of the attention of those who are so circumstanced as to need information with regard to the most proper and profitable management which ought to be exercised.

The soils under consideration, namely, thin clay and peat earth, have a great stomach for dung, while, unhappily, they yield but a small quantity of materials from which that article can be manufactured. It is therefore indispensably necessary, that such soils should be tenderly cropped, and never exhausted; but that, on the contrary, by the aid of pasture grass, they should be kept in a fresh and recruiting state, so as they may be enabled to carry corn crops when broke up, and to go on with less dung than would be called for were they more deteriorated and run out. I will not assert that these soils, when in grass, will make much compensation to the occupier, after the first year's crop is consumed; but from repeated experience I maintain, that they cannot be successfully cropped, without the assistance of that powerful auxiliary.

Supposing that a farm contains 300 acres of such land as I have mentioned, the first inquiry is, how a farm of that description is to be managed with advantage to the occupier. Laying it down as a primary principle, that grass is the basis on which good management is to be erected, I venture to point out the following rotation, as best calculated to promote the improvement of the soil, consequently the interest of the occupier.

1st Year—Summer fallow, on which dung is to be laid, as far as it can be procured.

2d Year—Wheat, where the fallow was dunged; and, where it was not dunged, either rye or oats to be sown, according to the nature of the soil. If the surface is soft, rye will be found the most beneficial crop; where otherwise, oats deserve to be preferred. Grass seeds to be sown with the crop after fallow, whatever grain is put upon it.

3d Year—Grass, a small part thereof to be cut, and the remainder pastured.

4th Year—Pasture grass.

5th Year—Pasture grass.

6th Year—Broke up for oats, and the land to be fallowed in the seventh year; with which the second rotation commences.

In this way, a farm of 300 acres would be cropped with 50 acres of wheat, rye, or oats, after summer fallow, and 50 acres

of oats after three year old grass, while 150 acres would remain in grass, and 50 be devoted annually to summer fallow. The portion of summer fallow which remained without dung in the first rotation, to receive manure when the second course came round.

It is now necessary to notice what number of men and horses would be required to execute the labour of a farm so circumstanced. In my humble opinion, three men and six horses are sufficient for plough work. Though at first sight this small number may surprise some people, yet, upon a recollection of the circumstances under which a farm of this nature is placed, such surprise will vanish. The winter work may easily be undertaken with the strength mentioned, seeing that there are only 100 acres to get one furrow; and as for the summer fallow, as there is no seed-work after the oats are deposited in the ground, the whole may be cross-ploughed before the term of Whitsunday arrives. Such soils are generally easily fallowed, seldom requiring more than five furrows, and never above six; besides, as fallow comes often round, the longer that the rotation is practised, the easier will it be executed.

By a rotation of this nature, seven hundred bolls of grain, or thereby, may be raised each year upon an average, while the yearly consumption at home would be about three hundred, leaving a disposeable produce of four hundred bolls. It is evident that a farm of this soil, though consisting of 300 acres, is unable to pay a high rent, because the large portion in grass neither can carry forward much stock, nor is it capable of feeding such to perfection. Perhaps the breeding and feeding of lambs on such soils is the most advantageous mode of stocking them, because it is only in the first part of the season, say June and July, that grass is to be obtained from them, at the latter end of which period the lambs are sold, leaving maintenance for their mothers; but in this way, it is only the lamb and the fleece of the ewe, that can be calculated as profit; the carcase of the latter being seldom worth more than the price at which she was purchased. Two ewes per acre are a sufficient stock in general cases, upon the soils alluded to. Often that number is too many.

I have thus submitted to the consideration of your readers my opinion on the best way of cultivating and managing thin clay and peat earth soils incumbent on a retentive bottom; which you may trust is the result of long and attentive experience. When I mention peat earth soils, I mean, where peat earth forms only a part of the surface, which is the case with a vast number of upland fields over all Scotland. But where the surface is entirely composed of peat earth, the management pointed out is not applicable. Indeed,

deed, fields of that deſcription are ſcarcely worth cropping with grain under the preſent expenſive rate of labour, unleſs in particular ſituations where alluvial earth is at hand for making compoſts, or when clay can be obtained to give them a body or ſubſtance. But in each of theſe caſes, improvement is executed at ſuch an expenſe, that none but expert cultivators ſhould attempt it. The outlay is great in the firſt inſtance, while the return is uncertain and precarious; and, at all events, the rent to be paid by the cultivator ought to be very ſmall, otherwiſe the benefit to be reaped, after every exertion, may be undeſerving of regard.

It was omitted to mention, that an application of calcareous matter may be highly beneficial to the ſoils firſt mentioned, either in the firſt or ſecond courſe of ſummer-fallow, provided ſuch has not been already liberally adminiſtered and ſucceſsfully cropped out. Forty barley bolls (240 buſhels) of lime ſhells to every acre of ſuch ſoils, will make a much ſmaller quantity of dung capable of impregnating them, than if this aid were withheld. At the ſame time, the graſs that ſucceeds will be of a more feeding quality, and the ground capable of yielding richer crops when again broke up. Though theſe benefits will be felt where the ſoil has not been previouſly wrought by lime, yet the contrary will generally follow where it has been drubbed and exhauſted by the application of that article. In the latter caſe, the expenſe of purchaſing lime is in reality ſo much money loſt to the owner; and in ſome caſes it has been found adverſe to his intereſt, in direct proportion to the quantity applied. I am yours, &c.

RUSTICUS.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

SIR,

A SERIES of letters from a young farmer to his father lately fell into my hand, and I take the liberty of furniſhing you with a copy of them, truſting they may in ſome reſpects be amuſing, and perhaps intereſting to your readers. It appears that the young man had been ſent to learn the art of agriculture in its various branches, under an extenſive farmer who reſided in a neighbouring diſtrict; and was employed in the character of a head ſervant, or as one to whom a particular department of work was entruſted. From a young perſon ſo ſituated, you are not to expect a great portion of information, or many important remarks, though I entertain few doubts with regard to the degree of intereſt which may be taken in the details given of the ſeveral articles of farm buſineſs which came under his view. For the ſake of

connexion, I have arranged the numerous letters before me into four classes, each of which is applicable to the business executed at the different seasons of the year; and I eagerly hope that such an arrangement may be useful and advantageous. I have only to add, that the letters were wrote several years ago, and am yours, &c.

PHILO-GEORGICON.

Letters from a Young Farmer to his Father.—Class 1st.

DEAR FATHER,

AGREEABLY to your desire when we parted, I sit down to give you some account of my reception at Barnhill, where I arrived on the second day of my journey. I found Mr Jamieson at home, and was received in a kind and friendly way. He first introduced me to his wife and daughters, and shewed me the apartment which he said was to be mine during my residence with him. You may believe I was a little discomposed by the sight of so many new faces; therefore, Mr Jamieson kindly proposed a walk for an hour or two through the farm for my relief. The farm appears to be very extensive; but on this point I will afterwards speak with more precision. After work hours, I was introduced to each of the principal servants, who were informed as to the object of my coming to this place, and desired to give me every manner of countenance and assistance in their power. Mr Jamieson says I am to have a charge also, but has not communicated the nature of it. I shall write down my observations carefully, and send them as opportunity occurs.—Bell rings for supper.—I find every thing here is conducted in a regular way; and that though all seem to be in a *haste*, yet none are in a *hurry*. I have often heard you illustrate the difference betwixt these two terms, and now believe that I will see it practically exemplified.

February 5.—Mr Jamieson has this day sown a large field with wheat, which field carried turnips last year, and had been regularly ploughed as the turnips were consumed or carried off. He desired me to attend the pickling process, which was carried on early in the morning by the different sowers, under the inspection of the head ploughman, and executed in the following manner. A quantity of stale urine being provided the preceding evening, and several bushels of hot lime shells laid in the house where the process was to be gone about, the wheat was thrown on the floor in small quantities at a time, and sprinkled with the urine out of a garden watering pan. When something like twenty bushels were wetted, the heap was turned over, and carefully mixed, after which hot lime was riddled upon it; and the like process commenced with another heap, till the whole was finished. Carts were then brought to the door, and the grain taken to the field, where

where it was soon deposited in the earth. Five sowers and thirty harrows were employed. The whole work was completely over before the evening, and grass seeds were sown upon the field previous to the harrows going over it the last time. Three double times of the harrows were given; the first in length or for *breaking in;* the second across, which pulverised the ground sufficiently; and the last in length, as a covering to the grass seeds. It was chiefly white clover and a sprinkling of rye grass, that were used. The field was, lastly, neatly water furrowed, and presents a most husbandman-like appearance. I have been more particular in this description, because wheat, at this season of the year, is a rarity with you; and I don't remember of having seen you sow grass seeds so early. I hinted to Mr Jamieson, that there might be some danger to the seed, from the frosts in March and April; but he answered, that repeated trials had satisfied him that no hurt was to be apprehended. Indeed, experience must be the best guide in this and every practice.

February 10.—Mr Jamieson is very throng at present, being just beginning his pea and bean seed. He lays down, as a positive rule, always to rise from bed at least an hour before day-light, I mean, at this season of the year. By which means, he gets sufficient time to deliver his orders to the several head servants before work hours commence; but his method of doing those things shall be described hereafter.

A few days ago Mr Jamieson shewed me his farm, which, I believe, contains about two thousand acres, apparently of excellent soil; though, at this season of the year, a stranger, especially a novice like me, may fall into great mistakes. It took us four hours on horseback to survey the whole, so you may figure the difference betwixt the extent of business executed here and with you, whose farm may at any time be perambulated before breakfast. He told me, in the course of our ride, that he would, at some leisure hour, give me a sketch of his management. In the mean time he has entered me to business; and you will no doubt wonder that I am capable of a charge so early. Why, then, my business is to oversee the odd men or labourers, that is, the servants not employed at plough or barn-work, or about the live-stock. Mr Jamieson says he will give me some help till better acquainted with the men, and the nature of their work; but that, afterwards, I must look sharp about me, and see his orders faithfully executed. I intend to use my best endeavours, both on account of honour and interest, because, were I to be negligent, I foresee that my removal would be the immediate consequence, which would not only be disgraceful to my character, in the first instance, but eventually detrimental to my future prospects. In a word, I have got ten men to superintend, which,

to be sure, is something like a sergeant's command; and, to keep them tight and tractable, will require all my small stock of prudence and exertion.

The implements belonging to my men have been formally delivered to me with a catalogue of the whole. When *tear* and *wear* occurs, I am directed to mark it down, and produce the broken or disabled implement at the end of each month, when the catalogue will be examined, and deficiencies supplied. These I consider to be excellent measures; and believe that heavy losses, both from pilfering and negligence, are sustained by most of farmers from the want of them.

I shall furnish you with a copy of my catalogue, which, at least, may amuse you.

10 spades.	10 small do. for spreading dung.
10 broad shovels.	10 forks.
10 narrow do.	10 scythes.
10 picks or mattocks.	10 scythe stones.
A complete set of quarry implements.	30 hay rakes.
	10 wheel-barrows.
10 pair wool scissars.	10 hand-barrows.
10 hedge hooks.	6 bean drills.
6 pair hedge scissars.	6 turnip do. of different kinds.
10 strong grapes.	

Taking care of these articles, and keeping my *corps* of 10 men at work, I am vain enough to consider as sufficient for me; at least, I am almost certain that one half of the farmers in the island have not so much to look after.

We must now enter to work. The day after I got my commission, I went to the office with the other head servants. There each got his orders, which Mr Jamieson, to prevent mistakes, delivers always in writing. Mine were as follows, and I send it to you as a sample.

Orders for George Campbell, Feb. 10.—John Jackson, Peter Simpson, and James Hay, go to the quarry; William Hay, and Thomas Kemp, to plash hedge in Brickfield park; Donald MacLean, Alexander Martin, and John Fraser, to turn compost middens; Archibald Kinnear, and James Dods, to scour ditch at the under end of the Cross-gate park.

This order, with a memorandum concerning the work executed, Mr Jamieson directed me to deliver to the clerk at night, who then enters it in the books. This you will say is going very regularly to work; but where so much is to be done, there is a necessity for method, otherwise confusion would be the consequence.

Our head ploughman tells me, they have sown 20 acres with peas

peas this day, which are all done off and water-furrowed. He says the ground harrowed tolerably well, and left a round clod upon the surface. I understand that beans are to be drilled to-morrow, six of my men being directed to wheel the drill-barrows.

February 16.—Mr Jamieson's business now begins to open upon me. He really manages a great deal of work, and does every thing without noise or confusion. He is indefatigable himself, and takes a great deal of fatigue; but keeping little company, and that only of sober people, he is almost constantly employed one way or other upon his farm; and when he has visitors, his way is so well known, they never trouble him with bad hours. He is an early riser, laying down for a rule, as already mentioned, to have all his orders delivered before the working people attend. His house is well furnished, and abundantly supplied with good victuals of all kinds. There is one table kept for himself and family, another for the head servants, and a third in the kitchen; and a full supply is regularly presented at each.

He sent for me last night into the parlour.—Well, George, said he, how do you like your office? Pretty well, I replied, Sir, providing I fill it to your pleasure. Why, not worse than might be expected from a beginner. Time and attention, I hope, will produce improvement. But sit down. I promised to explain, some day or other, my mode of management, and, having a leisure hour, shall be as good as my word.

This farm contains altogether about two thousand acres; and, when it came into my possession, was divided into eight separate farms; but, as I had long entertained an inclination to try farming on a large scale, I ventured to take the whole, though at the time in miserable order. Indeed, it has always appeared absurd to me, that the occupation of a farmer should, by custom, be restricted to certain bounds, while the merchant or manufacturer is encouraged to extend his trade or business proportionally to the extent of his capital stock. With these views in my head, and a decent sum of money in my pocket, I settled here, and proceeded to realize my former opinions. This house, and all the adjoining offices, were erected by me, the old houses and steadings being widely scattered over the ground, and of little use, except such as were preserved for cottages. You see I am tolerably well provided with accommodation of every kind, both for a great number of servants, and a large stock of bestial, which things are absolutely necessary, if farming is meant to be carried on with comfort and profit. My landlord aided me in the buildings, by furnishing one thousand pounds; but the sums I have expended, at different times, are three times above the amount of the assistance thus obtained; though I don't grudge such expenditure, because I consider every halfpenny of it to be well applied.

It required a considerable time before I got the farm arranged to my mind, much of it being formerly run-rig, and intersected by balks. However, by summer-fallowing to a great extent, and throwing in plenty of clover and rye-grass, I, at last, got the whole into regular breaks of one hundred acres each. Part is enclosed, and a considerable proportion remains open field; but this I don't view as attended with much detriment, where corn is the chief object. The enclosures that I have are good; and this I consider as of more importance than having many of them.

My method of cropping is very simple, and regulated upon this principle, that the earth delights in variety; therefore, I chiefly follow what is called the alternate husbandry. As for a regular rotation, in the strict sense of the term, I never followed any thing of that kind, but limited my mode of cropping to a sequence of white and green crops, without studying particularly what variety of each was to be cultivated; and, abstractedly speaking, to take culmiferous and leguminous crops alternately, I hold to be the *ne plus ultra* of good farming. No doubt this plan at times has been broke through, because seasons and other circumstances have rendered a departure from it necessary; but where it can be adhered to without material inconvenience, I am clear that a departure therefrom should be carefully avoided.

My last year's crop consisted of 250 acres of wheat, whereof 100 acres were after summer fallow, 50 acres after turnips, and 100 acres after beans and peas; of 150 acres of barley, whereof 50 acres were after turnips, and 100 acres after beans and peas; of 300 acres of oats, whereof 100 acres were after clover, cut and used in the stables and straw-yard, and 200 acres after pasture grass; of 200 acres of beans and peas, most of them drilled; 100 acres of clover and ryegrass sown amongst fallow wheat; and 800 acres of pasture grass. These, with 200 acres in summer fallow, turnips and potatoes, comprehended the whole of my farm, and in my humble opinion, made the system so complete as almost to ensure a succession of good crops.

You will attend, that as I sow grass seeds along with the grain that succeeds summer-fallow and turnips, and also with 100 acres of barley, which followed drilled beans, I am enabled to retain the like number of acres each season in grass; because three breaks of grass, one after cut clover, and two after old pasture, are ploughed in each year. This gives a regularity to labour, always desireable; and serves, under a parity of circumstances, to keep the whole of my farm in equal and uniform good order. I by no means, however, adhere to the number of acres in each grain condescended upon as forming the crop of last year, because I have sometimes taken wheat on the clover break, and at other

times

times have substituted barley for wheat on the breaks which had carried beans and peas. My aim is to have culmiferous and leguminous crops alternately; and this being attained, I am not rigidly studious to preserve the quantities of each already mentioned. If I have 700 acres in white crops, 1200 acres under leguminous crops, and 100 acres in naked summer fallow, I am perfectly satisfied.

I hope that a kind of rough view is given of my farming system; and, at a future time, shall be ready to afford any explanation which you may suppose to be necessary. I never thought farming a mystery, nor do I think that good can arise from keeping any branch of it secret and concealed, as attempted by many of our brethren. My opinion is, that the more generally a knowledge of husbandry is diffused, so much more will the public be benefited; and that the man who has gained wisdom in the school of practical experience, and refuses to impart a share of it to others, acts a part not less inimical to the public good, than he who, having discovered a remedy for a pestilential disease, obstinately keeps the secret to himself, without benefiting society by the discovery.

The above is the substance of Mr Jamieson's conversation. I really think him a sensible man, and, although remarkably quiet, yet, by an active turn and disposition, eminently qualified for the line of life he has chosen. You may be assured that I shall study to cultivate his good will, being certain that the possession thereof will tend much to my advantage, though equally sure that it is not to be gained unless attention to business is punctually bestowed.

I forgot to mention, that the first day I entered to business, Mr Jamieson accompanied me through my several stations, and gave me particular directions how each branch of work was to be executed. He also instructed the men to give absolute obedience to my orders, and to act under me with the like promptitude and discretion as if he were upon the spot himself. I am authorised to dismiss immediately any one who acts unfaithfully, or neglects his duty; but this authority shall be administered with prudence, though with justice to the interest of my worthy employer.

February 28.—I am sending letters very frequently; but were I to do otherwise, one third of what I learn every day could not be communicated. The obligation conferred in sending me here is great indeed; and assuredly, if I am not taught farming in all its branches sufficiently, it is not for lack of opportunities.

It was stated in a former letter, that Mr Jamieson had several head servants, to whom his orders were entrusted. I am now well acquainted with them all, and shall attempt a description of each, and their respective duties.

The first is the head ploughman. His name is James Elliot. He is a middle-aged man, is a complete ploughman, perfectly capable of teaching an ignorant fellow to manage the plough in the best style, and in short qualified to execute every branch of field work. He has eighteen ploughs under his inspection; seldom works himself, but accompanies the ploughs to the field, and sees every thing properly executed. He feeds the horses, has the charge of all work done by them, and of all the implements which appertain to that department.

The second head servant is Ralph Howard, who is a thorough judge of live stock. He has the charge of the whole sheep and cattle kept on the farm, and attends markets either for buying or selling. He has six herds and feeders below him.

The third head servant is John Fairbairn, who superintends the stacking, thrashing, and dighting of the corn; also the stoning of grass land, weeding the corn fields, gathering quickens, &c. from the fallows, &c. &c. He has four men and five women constantly under his charge, and occasionally a greater number of the latter as may be called for by the work to be executed. Draughts are often made from my *corps* to assist him, especially when the thrashing machine is employed.

The fourth head servant is the clerk, whose work is easiest in one sense, but most fatiguing in another. He writes out the orders,—posts the books,—rides upon business,—receives money,—and pays it away as ordered. Every night he gets reports from the other head servants; and upon Saturday settles accounts for the past week with Mr Jamieson.

The fifth head servant is your humble servant, and the nature of his office is already explained.

You would be surprised, notwithstanding the number of people employed, and the multiplicity of business executed, to see in what order and method every thing goes forward. In fact, every headsman may be considered as a separate farmer; with this beneficial difference, that his attention is in a great measure directed only to one object; whereas, in ordinary cases, the attention of a farmer must be displayed upon multifarious articles of business, some of which, of course, stand a chance of being neglected. Mr Jamieson insists, in the most pointed way, that none of us shall interfere with the business of his neighbour, or even go near each other during work hours, unless when directed by him. He maintains that these rules are not only necessary to support good government, but even to preserve unanimity amongst ourselves. I believe he is in the right, and shall walk accordingly.

Elliot is always first up in the morning, having his horses to feed; and rings a bell placed on the top of the granary, which summons his men to the stables to feed and dress the horses; after

after which breakfast is taken. In the mean time, he goes to the office, and receives orders for the day, with which he instantly returns, and distributes among his ploughmen. In good weather this is an easy task, because the whole are usually kept together; but, in bad weather, the scene is changed, and a greater division of orders becomes necessary. Howard, after receiving his orders, goes to his herds and turnip-feeders in the byres; Fairbairn to his barns; and me to my old fellows, who assemble in a shade adjoining to the house, where their implements are deposited. Mr Jamieson goes where he pleases, and superintends the whole.

At night, after work is over, we go to the clerk's office, and give in our reports, which are entered in the journal for Mr Jamieson's inspection, who, from these vouchers, and observations made by himself, determines upon the orders for next day. When money is wanted,—as every headsman pays the people employed in his department, we make out an account, which is shown to Mr Jamieson. If he is pleased to order payment, the pencil mark of '*Pay*' is affixed, and we go to the clerk, who takes our receipt at the foot of the account, and delivers the sum wanted. These accounts are kept by the clerk till Saturday evening, when Mr Jamieson takes them off his hand. By attending to these methods of carrying on business, I am bold enough to say, that the affairs of this farm are regularly conducted, and with much less bustle and confusion than on farms not a sixth part so large, where order and precision are neglected. You will be well pleased with these particulars, being a lover of regularity, and a keen friend to systematic arrangement in executing every kind of business.

March 4. Mr Jamieson desired me to take a walk with him this forenoon, which I did with much pleasure. We went to a field where Elliot was drilling beans, his whole eighteen ploughs and six drill barrows being employed; and a noble sight they made. 'Elliot,' says Mr Jamieson, 'have we a prospect of obtaining a good crop here?' 'In my opinion,' replied Elliot, 'we have a fair chance of it; the land is rich and clean; and if the season is not against us, eight or ten bolls per acre may be expected.' 'Pray, Mr Jamieson,' I said, 'how many beans will you sow here?' for I could hardly see to the end of the field. To which he replied, 'There were just one hundred acres in the break, which may require from 130 to 140 bolls of seed.' 'And what time may it take to plough and sow the whole of that quantity?' 'Elliot,' says Mr Jamieson, 'how long have you been here?' 'Why, Sir, two days before this one; and I am tolerably certain that, in three days more, if you allow the whole strength to continue, we shall have the field finished.' As this was nearly an acre per plough per day, I expressed some amaze-

ment

ment at the quantity of work executed; but Elliot said, that a pair of good horses going with a light furrow, such as should be given to covering beans, were unprofitably employed, if they did not turn over an acre per day, at two journeys of four hours and a half each. So much for the despatch given to business at this place.

We went from the bean field to the land intended for oats, which Mr Jamieson thought to be in good condition for receiving the harrow; and added, that the moment his bean seed was over, he would strain every nerve to get his oats deposited in the ground as speedily as possible. He informed me that his earliest oats, though often of least bulk, were always more prolific than those later sown, and that a day at this season was of incalculable value. Here ended our walk; and I went to a detachment of my old fellows, employed at turning a compost midden, the remainder being with Elliot wheeling his bean drills.

Howard tells me, that he has got a few lambs, and expects ten or twelve score more, before eight days are over. The ewes, I notice, have got a supply of turnips lately on their pastures, which Mr Jamieson assures me, is absolutely necessary at this season, if good lambs are to be reared. It is the New Leicester or Bakewell sort of sheep that are chiefly kept here, and they are quiet and docile in disposition, beyond any sheep that hitherto have come under my observation.

March 20.—Our oat-seed is finished this day; and when I tell you that three hundred acres have been sown, you will allow that no idle bread has been consumed, either by men or horses. I noticed that thirty-six harrows were employed, and learn from Elliot, that above thirty acres were, on an average, finished in each day, a good part of it having to get four double times of the harrows. He added, that when grass land is not very tender, he makes it a rule to go over it two times in length, before he drives the harrows across; and this is done so as the furrows may not be pulled back, and the sward brought into its original position, which hurts the crop exceedingly. I understand that about one half of the early varieties are sown, and the other half of the kinds called Angus and Blainslies. I ventured to inquire at Mr Jamieson which of the sorts were most profitable; and he was so good as to inform me, that both had their properties, though as the early ones generally yielded the greatest quantity of grain, he was partial to them; but that as the others produced most fodder, which was an important object with him, he was led to sow them in equal proportions; and that, in this way, his harvest work was divided, and much hurry and hazard avoided at that period. This, to be sure, is a matter of importance, therefore deservedly viewed in that light by so celebrated a husbandman.

Our

Our turnip fed sheep are all gone off; and the field which carried turnips is forthwith to be cleared, and the remainder of the crop brought home, so as the plough may be entered preparatory to the sowing of barley. It seems that the charge of topping, tailing, and building of the turnips, is to be entrusted to me, and of course that my squad is to be employed in these operations. Howard informs me, that about thirty of the turnip cattle are still on hand, and that these, and the stock of ewes, will consume all the turnips that remain; though, he adds, that they are losing their nutritive quality very fast. Mr Jamieson continues to favour me with his approbation; and my fellow servants, particularly Elliot, have shown a steady desire to give me every manner of assistance. In a word, my time here is not only usefully but agreeably spent, and I thank you once more for placing me at such a school.

April 8.—The barley after turnips is at last sown, though the work gave Elliot more trouble than he expected. Owing to a sudden drought, the ground turned up with a *heel*, as he called it; so a cross-ploughing was first given; then, after harrowing it, rollers were applied; and finally an ebb seed furrow; when it was sown with early barley and grass seeds. The field looks well to the eye, being finished in a most husbandman-like style; but upon talking to Elliot concerning it, he shook his head, and said, he seldom saw good barley after turnips, when the land required to be *forced*; and that he will pawn his word that we have better barley upon the break that carried beans last year, which he is forthwith to seed-furrow. He says that he means to sow this field *green*, or after the plough, and not allow it to spire and lose brairding sap. The field to be sure is clean, and perfectly free of quickens; so I dare say the method meant to be taken is a good one. Fairbairn and his women, for several days, have been gathering stones on the break of clover intended for cutting; and my *corps* have digged a number of drains in the adjoining field intended for summer-fallow, into which the stones are deposited. Three carts are employed to drive the stones, which are instantly put into the drains; and while Fairbairn superintends the gathering process, the task of filling in and covering up, is committed to your humble servant. We work five hours in the forenoon, and four in the afternoon, and go merrily forward. I am, &c. &c.

TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On the Smearing of Sheep—Another Reply to A. S. on that Subject.

SIR,

IMPRESSED with a desire of correcting mistake, and refuting error, I take the liberty of submitting to you the following observations

observations on an essay on smearing, by A. S., which appeared in Number 26th of your Magazine. His remarks, which are desultory, I shall endeavour to follow in their order, though not well adapted for a clear and connected state of the matter. That in the Northern counties, smearing should not be extensively followed, may be owing, I presume, to that improvement, like many others at present practised in the Low countries, not having yet found its way thither; or the breed of sheep, which is of the long-wooled sort, being not so much benefited by that process, as the Cheviot or short-wooled sheep. It is certain, at least, that the wool of the Leicester breed is much deteriorated by salving, as it injures materially the manufacture of it. In many parts too, of the north, it is a custom to drive their stock, in winter, from the high to the low grounds; and such being in many places covered with brushwood, a great proportion of the wool is lost, and they think it quite unnecessary to be at the expense of salving, which in this case would only augment the loss. Ticks and cades are different animals. *Ticks* are bred in the ground; and, during the spring and early part of the summer, annoy the sheep by getting into the skin, and are more common where the disease called in this country the *louping ill*, is prevalent. *Cades* chiefly harbour in the wool.

Salving completely destroys the latter, and it is not till the new wool is springing that they again make their appearance. The inveterate habit that A. S. ascribes to the stock-farmers in the south of Scotland, and to which they have been long wedded, will not be given up while it is founded on undeniable principles of advantage and interest; when it can be proved otherwise, he will find no set of men more willing to renounce their errors. The virtues of salving are many and great. It is not, however, considered in this country as a preventive for the braxy, except for a few days after the operation; but that it is a specific for the scab, is placed beyond a doubt; and when that disease makes its appearance in any flock, smearing the infected sheep completely prevents it from spreading. That salving is also of great benefit in keeping sheep dry, may be easily inferred, from the small impression rain makes on any body containing oil in its composition: and, that an addition to the natural covering of an animal should assist in keeping it warm, does not require much proof: it also greatly promotes the growth, and refines the pile of the wool. If the only use of smearing, as your correspondent hints, was the killing of cades, no farmer, in this enlightened period, could think of being at so much expense, when the effect might be produced by a much cheaper process.

A. S. next insinuates, that, when a medicine is alleged to cure too many maladies, may it not be shrewdly suspected to be efficient

ficient in none? A conclusion by no means admissible in this case, where the only diseases which he mentions as alleged to be cured, are the scab and braxy, of which I have already spoken. Are there not many medicines equally and more efficacious in the human frame?

Tobacco liquor is an excellent remedy for the scab, and is used for long-wooled sheep at all times, and for the short-wooled in the spring and summer months, when salving would be both prejudicial and unnecessary, for reasons too plain to be overlooked. I have heard that shepherds formerly did tar their clothes to defend themselves from the inclemency of the weather, but cannot vouch for its authenticity. Soon after smearing, the wool growing luxuriantly, pushes up the tar from the skin, and there is of course a coating of clear wool next the animal, which, according to A. S.'s notice of Mr Leslie's theory, may keep the animal warm, while the exterior tarred covering will defend it from the weather. I do not however wish to enter the lists with such a powerful adversary as the celebrated author of the essay on heat; but must content myself with observing, that, while the practice of salving is found by experience to have the beneficial effects already and hereafter to be enumerated, it will not be abandoned for any theory, however specious. Smearing was certainly given up, in a great measure, in the eastern parts of this county, at one time; but, after several years trial, they have all (with one exception or two) returned to their old inveterate habit;—a strong proof of its good effects. To the question, Is the effect of tarring worth the trouble and expense of it? I beg leave to subjoin the following statement as an answer. Six fleeces, properly laid, will in general, throughout a flock, make one stone, while it requires eight unlaid; and the difference in the price of the two will amount at most to 2s. per stone. Supposing, then, that the *laid* wool sold at 36s., and the *unlaid* at 38s., the price, consequently, of one fleece of the laid is 6s., of the unlaid 4s. 9d. The addition of 6d. per fleece, for salving, reduces the price of the laid to 5s. 6d.; leaving, however, a profit of 9d. more than the unlaid, besides the many advantages formerly mentioned.

The deterioration in the quality of the wool, consists only in the dark hue which salving gives it; as, for the purposes to which short wool is applied, I find, in general, that the wool-staplers like it as well, if not better, than the unlaid. I never heard of any loss by death, or the health of sheep being injured by smearing, except a few days sickness at first; which inconvenience is, however, now avoided by using the tobacco liquor, with a proper proportion of the spirit of tar (which ingredient ought never to

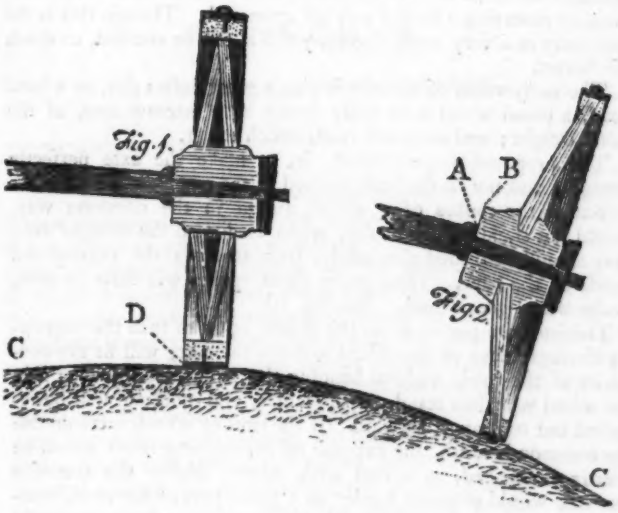
be

be omitted), the expense of which *recipe* will amount, I find, to nearly 1d. per head. Cold, wet, and exposed situations, injure the condition of the sheep; and the poorer they are, I presume they will be more liable to vermin. The reason for laying smearing aside in the Low country, has been mentioned above, viz. the breed being chiefly of the long-wooled sort. No houses are (or can be, I may say with truth) erected to shelter the ten thousandth part of the stock bred on the Border hills.

During the foregoing remarks, I have carefully avoided taking notice of any of A. S.'s attempts at wit, which he introduces with a view to render ridiculous a practice which he does not seem to understand. I would however advise him, as he appears to have the public weal so much at heart, that if at any time, from too liberal potations, he should think himself in danger of the braxy, to use the precaution he wonders has not before been thought of; and at the same time, if he has a bald pate, or is annoyed with either of the diseases which, in his own words, are quite familiar to a Scotchman, to get himself salved, and favour the public with the result of his experiments, which perhaps, in the end, might benefit both his head and his pocket. The addition of the feathers would vastly become him; and if set up on one of our bleak hills in a wintry day, would soon make him acknowledge the benefit of his covering, over and above the felicity arising from the operation.

These observations submitted to you, are the result of my own experience, with what information I have been able to collect from more experienced hands, and I trust you will find them correct. Facts, Sir, are stubborn things; and it will require much more strength than possessed by one of A. S.'s powers to pull down a fabric which has stood the test of experience for ages. Farmers are, in general, open to conviction where their interest is concerned; and I have no hesitation in saying, that every one of my brethren around me, would willingly abandon a practice which is attended with much trouble and expense, were it proved to be prejudicial to our flocks or interest; till then, we must just jog on, and not be put out of our way by every puff that blows. We have buffetted many a cold hard storm; and would be sorry to see the poor animals shivering with cold, while we could add to their comfort by a sixpenny coat, and at the same time put ninepence additional into our own pockets. Should the above remarks merit a place in your useful Work, you will oblige me by inserting them. I remain, Sir, your most obedient servant,

A Border Farmer.



TO THE CONDUCTOR OF THE FARMER'S MAGAZINE.

On the Construction of Common Cart Wheels.

SIR,

I BEG leave to submit to your observation, a few remarks on the defects of the common cart wheel, and also an attempt to remedy these defects; which, if you think of sufficient importance, I would be glad to see in your Magazine.

The common cart wheel is part of a cone, with the small end towards the outside; the axle also is bent down at the ends, that the wheel may fit the convexity of the road, and the spokes may stand perpendicular.

This bending of the axle makes the inside end of the nave of the wheel (at B, fig. 2.) to press hard against the part of the axle opposite to it (at A), whereby the friction is much increased. The wheel is also, by this bending of the axle, thrown out of the perpendicular, which makes also the friction greater, as the wheel must be held up, as well as drawn forwards. The wheels are also brought nearer to each other at the bottom, which, by narrowing the base, makes the cart more liable to be overset; and also, when the shafts are raised above the level of the wheels, they are brought

brought nearer to each other before than behind, as may be easily seen by observing a loaded cart set upon end. Though this is the case only in a very small degree, yet if it can be avoided, so much the better.

The narrowness of the rim is also a great defect; as, on a hard road, a broad wheel is as easily drawn as a narrow one, of the same weight; and on a soft road, much easier.

The proposed improvement, is, to make the axle perfectly straight, and not in the least tapered at the ends.

But as the spokes of a wheel, dished in the common way, would not stand perpendicular, when used with the straight axle, they should be dished alternately, from towards the outside and inside of the nave. Thus every three spokes will form an arch, as the wheel goes round. (See fig. 1.)

The iron rim put on from the inside, so as to turn the narrowest circumference of the wheel towards the cart, will fit the convexity of the road, without bending the axle, (see fig. 1. at D); the wheel will thus stand perpendicular, and nothing will be required but to draw it forward. If the rims of wheels were double the common breadth, the expense of maintaining roads would be greatly diminished, as a cart with wheels double the common breadth, would press no harder on a given part of the road, loaded with 20 cwt., than one with the common wheels would do with 10 cwt.

Even if they were not generally adopted, so as to produce an advantage to the roads, they would be advantageous to the individuals who used them on a soft road, especially to farmers; as a cart with broad wheels might be used on land where it would be impossible to draw a common cart; even on land not so soft, they would be an advantage in not cutting the turf, or poaching the surface.

Wheels of the proposed breadth may be made so thin as to be very little heavier than common: as the rim of the narrow wheel generally gives way where the spokes are let into it, less wood is cut out in the broad than in the narrow wheel for this purpose.

Fig. 1st, The proposed improvement.

Fig. 2d, The common wheel.

C C, Section of half the breadth of the convex road.

I am,

Sir,

Your most obedient servant,

J. G.

Glasgow, 27th June 1806.

BRANCH

BRANCH II.

Agricultural Intelligence.

The winter quarter has been unfavourable to almost every branch of arable husbandry, and in several districts furnished few opportunities of executing ploughing and other operations in a successful way. At the date of our last publication, the sowing of wheat was much behind, particularly in those counties where that valuable grain is extensively cultivated; and the ground, in numerous instances, had become so wet, that hardly either plough or harrow could be employed on clay soils with advantage. Notwithstanding of these adverse circumstances, a good deal of wheat was deposited in the ground during November; but toward the end of that month, the wetness increased to such a degree as to stop further procedure, and even in many places to interdict the plough as completely as if the ground had been bound up with frost. December furnished variable weather, few days passing without less or more rain; but as fierce and uncommon high winds generally followed, the earth got dry to a degree that permitted ploughing to be executed, though in many places very imperfectly. Indeed, as the year drew to a close, people were under a necessity of taking the work in that way rather than none at all; though, without a considerable quantity of frost, it is difficult to conceive how the harrowing process is to be performed. Should a severe drought occur in March, such as happened in spring 1790 after a similar winter, the consequences may be of the most alarming nature. In the above year, the ground became so hard as to render the effect of the heaviest harrows and rollers of little avail in reducing it; and more than double time was required to finish a field, badly as it was done, than customarily happens. Some passing frosts occurred in January, but of too short duration to be of material benefit. The winter, taking it all in all, may be considered as one of the mildest with which this country has been visited for many years; vegetation has been but partially retarded; the growth of late sown turnips has not been impeded; the early wheats present a thriving and healthy aspect; and grasses show a verdure not much inferior to what is usually displayed in the beginning of May. However, should the portion of cold, ge-

nerally received at one time or other of the year, be dispensed in the spring months, the wheats on all thin soils must be exposed to imminent danger.

As many fields intended for wheat remain to be sown in the spring, a few words may not be unseasonable as to the *modus operandi* of the seed process at that period. In the *first* place, the earliest opportunity, after the ground is dry, should be seized upon; though, where the soil is rich, and the climate early, sowing may be risked so late as the end of March. This, however, may be viewed only as a matter of necessity, not of choice; and it may be added, that the late crops are usually inferior, both in quantity and quality, to the earlier ones, while they are exposed to greater danger from the equinoctial gales in autumn. *2dly*, The seed ought to be sown much thicker in the spring than in autumn, or even in the early part of winter, so as the ground may be filled with plants at once, without stopping to gather them by tillering. Thick sowing also lessens the quantity of annual weeds, a danger to which spring-sown wheat, even on the cleanest soils, is more or less exposed. In other words, the growth of these foes is impeded, by giving the ground a speedy covering of artificial plants. In the *third* place, an excess of harrowing ought to be avoided, and no more given than sufficient for covering the seed and levelling the surface. On this point, however, every person will judge for himself; because the quantity required must necessarily be regulated by soil, situation, and other circumstances. It is enough to state, that, if annuals are in the soil, the finer it is reduced so much more will their growth be accelerated. Much damage is often sustained from ploughing land too deep, which had carried turnips, and is afterwards seeded with wheat. In fact, such land ought not to be stirred deeper than the horse and hand-hoes went in the preceding season, otherwise a fresh flight of the enemy is brought into action, which, under different management, would have remained dormant and inactive.

Markets, on the whole, have not varied greatly since our last; any rise that has taken place being more attributable to the superior condition of the grain than to other causes. The estimate then given of the different crops seems to have been completely realized; indeed, it was formed from authorities that might safely be relied upon. Wheat has kept tolerably steady in price, though, as qualities are vastly dissimilar, the averages of markets have fluctuated much, and according to the nature of the supplies presented. The price of flour is therefore a surer test of the real value of wheat, than the market prices of the raw article; and from this

test

test it appears, that the general quality of the English wheat must be of an inferior description. Indeed, we are almost inclined to believe, that the effects of that dreadful malady, mildew, which raged so extensively through England in 1804, are not yet overcome; and this belief is strengthened by the large stock of inferior wheats which have this season appeared at Marklane. Perhaps the want of thrashing machines may be another cause, in this humid season, why wheats are so variable and unequal, at least in condition and value. Every person in the least versant with the qualities of grain, is able to appreciate the difference in the value of wheat thrashed by a machine, with that thrashed by the flail. In a year like the present, it may perhaps amount to five, and in some cases even to ten *per cent.*; and this material difference is accompained with one of another kind, severely felt in a dull market, namely, that few will purchase wheat thrashed by the flail, while they can obtain that thrashed by a machine. The reason is obvious, and would not have been mentioned, were we not aware that many of our readers are unacquainted with the benefits arising from thrashing machines. Instead of lying in a chaff heap for days and weeks, as must be the case where the flail is used, thereby becoming soft and tough, the grain, when thrashed by a machine, is instantly separated from the chaff, and prepared for market, without the smallest delay. Any further illustration is unnecessary.

Cattle and sheep markets have not advanced in the course of this quarter, full supplies having appeared in every part of the island. The quantity of *keep*, from the humidity of autumn and mildness of winter, has been great, and occasioned a larger portion of live stock to be sooner ready for the butcher than could have been reckoned upon. Perhaps this circumstance may have an opposite effect in the spring and beginning of summer; though, on this point, it would be rash to offer a positive opinion. So far as sales have hitherto been made, sheep may be viewed as the most profitable article, especially those of the true black-faced breed. This kind would seem to be rather scarce; in other words, the demand for them is fully equal to the quantity marketed.

The Property-tax will now be severely felt by the farming interest of Scotland, as the ten *per cent.* bill of last session, by the addition of two words (*in England*) takes away the right which Scots farmers formerly possessed, of having *one eighth* deducted from their rents, before the tax was ascertained. The withdrawing of this deduction, together with the allowance for children, of course renders the farmer's tax, when he is rateable, one shilling in the

pound of the rent which he has agreed to pay to his landlord. It is a dubious point, whether many of the recently set farms will afford a profit to the holder, at least in the first instance, adequate to the extent of the tax, which, at all events, he must pay, even should he fall back with his landlord; but, when it is considered that the act goes upon the assumption, that his profits are ten times the amount of the tax, then the absurdity of the criterion adopted to ascertain them must be discernible to the shallowest capacity. The complaints of individuals are not to be listened to in a business of this kind. But why do not farmers associate, in imitation of the manufacturers of pig-iron, and carry their joint complaints to the table of Parliament, who, it must be presumed, have subjected them to a burthen, without knowing their inability to sustain it? And, why do not the HIGHLAND SOCIETY, the only public body in Scotland to whom farmers can look for assistance, take the matter under their serious consideration, and use their endeavours to get that relief which every one, who takes the trouble to investigate the situation of farmers, must know to be merited? Were that respectable body to take up the question, we do not entertain a doubt but that relief would be obtained. There is not a farmer within our knowledge unwilling to pay ten *per cent.* of his *income* for the defence of the country, seeing that such a sacrifice is called for. But then this income is not to be a nominal and fictitious one, only to be found in the clauses of the bill which imposed it, or in the books of the commissioners under whom it is assessed and collected. No! No! No! The farmer, to be satisfied, must be assessed on the same principle with his brothers the merchant and manufacturer; and he ought to be dissatisfied (as he will be, if the spirit of man is in him) so long as he is not considered upon the same footing with other classes. That he is not, at the present moment, considered in that light, needs no illustration. In fact, the less he is able to pay, so much higher is he made to pay; and the worse that his bargain is with the landlord, so much greater is his share of the Property-tax. We find no fault with the tax itself. On the contrary, we esteem the *real* principle to be a good one, namely, that every man ought to bear his share of the national expenses in direct proportion with his means and abilities. It is the *assumed* principle, operating upon the farming interest, which we object to; whereby individuals of that interest are unequally taxed, while the whole body are placed upon a footing which at any rate renders their share of this tax infinitely heavier than the share of the burthen sustained by the trading and manufacturing interests. This is the sum and substance of our objections to the Property-tax bill; and, were they

they removed—were farmers placed on the like footing with landholders, placemen, stipendiaries, annuitants, merchants, and manufacturers—were their taxes assessed upon gains and profits, after rent and expenses of culture are deducted—then the Property-tax bill would meet with our unqualified approbation.

We are requested, by that active and intelligent gentleman Mr SITWELL, to intimate, that the *Sheep Shew* at Barmoor, Northumberland, for 1807, will be on the second Monday in July, when the following premiums are to be given.

'1. For the beſt pen of five wedder hogs, the property of the breeder, to be ſhown in their wool, clipped, and killed for the inſpection of the company—a Silver Cup, value Five Guineas.

'N. B. The killing may be diſpenſed with, if the parties wiſh it.

'2. For the beſt two-year old cart colt, or filly, the property of the breeder—a Silver Cup, value Five Guineas.

'3. For the beſt two-year old heifer, of any breed, the property of the breeder—a Silver Cup, value Five Guineas.

'4. To the inventor of any new implement of huſbandry that ſhall be deemed by the judges to have ſufficient merit to be recommended by this meeting to public uſe—a Silver Cup, value Five Guineas; or Five Guineas in money, at the option of the candidate.

'5. To the beſt ploughman—Three Guineas. To the ſecond beſt—Two Guineas.

'6. To the ſhepherd who ſhall, *without* any aſſiſtance, ſave and rear the greateſt number of lambs from any flock *not* exceeding 200 ewes—Three Guineas.

'7. To the ſhepherd who ſhall, *with* aſſiſtance, ſave and rear the greateſt number of lambs from any flock *exceeding* 200 ewes—Three Guineas.

'The candidates, in both caſes, to ſtate the age of the ewes; and the certificates to be ſigned by the maſters.

'It is Mr Sitwell's intention, in future years, to give ſmall premiums, or medals, for the beſt ſeeds of wheat, oats, barley, turnips, and graſs; and to make the meeting two days; as, from the multiplicity of buſineſs, it cannot be gone through in one day.

'Mr Sitwell hopes, that any gentleman having prime ſtock to ſhow, will honour him by ſending them to this meeting on the Saturday preceding, when every attention will be paid them.

'Several lots of thorough-bred Leiceſter ewes and gimmers, bred by Mr Sitwell, will be ſold by auction in the afternoon.'

SCOTLAND.

Upper Annandale Quarterly Report.

THE uncommon mildneſs of this winter has maintained an uninterrupted verdure on the paſtures; and field turnips are ſetting for bloſſom

ſtalks. The ſcarcity of provender for cattle has been much alleviated by the unuſual quantity of winter paſture; and in this country, where there is little clay ſoil, the plough has executed a very conſiderable extent of work, although ſome of the ploughed lands are beginning to grow.

It has not been neceſſary to ſtore the turnips this winter; nor would they have kept in that way. Wheat after potatoes, the uſual way in which it is ſown here, looks well; the quantity on the increaſe. Oatmeal, 2s. 8d. *per* ſtone Amſterdam; Barley, 4s. *per* Wincheſter buſhel, nearly 24s. *per* boll; Sown hay, 1s. to 1s. 2d. *per* ſtone of 24 lib. avoirdupois; Straw for litter, 8d. *per* ſtone; Wheat, 8s. 9d. *per* buſhel. The prices of ſheep and cattle are diſcouraging to the farmer; and thoſe of fat and hides alſo low.—— *Jan.* 16.

Selkirkſhire Quarterly Report.

THROUGH the whole of this quarter, the weather hath been continually varying between foul and fair; ſometimes heavy rains, accompanied with high winds, have fallen, and now and then a few good days have intervened; but, upon the whole, leſs froſt and ſnow have occurred, than ever remembered. The ground has not yet been covered with ſnow, and not above four or five froſty nights have happened; of courſe, ploughing has got pretty forward. Turnips and paſture graſs hath continued freſh and eatable, the latter furniſhing more food than is generally the caſe at this period of the year,—a favourable circumſtance for thoſe who felt the effects of the ſummer drought on their meadows and corn fields, and who were ſcarce of fodder for their beſtial.

Laſt crop turns out but a middling one. Much of the ſeaſon was wet; therefore, it could not be expected that a given quantity of corn could yield ſo much meal as in better ſeaſons. Prices keep nearly ſtationary; though, from the waſte of corns amidſt the fall of kingdoms, they are expected to look upwards. More ground ſeems allotted for wheat this year than uſual; therefore, barley and bear are loſing ground in the ſame ratio. Store ſheep are in prime condition; but a glut in the market, at the end of the year, left the grazier ſcarcely a fair return. Improvements in this county ſeem to keep pace with the growing proſperity of Britain. For the encouragement of which, the firſt thing requiſite, after putting the active farmer in poſſeſſion of a conſiderable length of leaſe, is *the opening of a direct communication with markets by good roads.* A great part of this diſtrict have long felt, and ſtill partially feel, the bad effects of ſuch improvident policy; but the preſent *day and generation* ſeem anxious to atone for former neglects. A number of perſons have been employed for two or three years paſt in making roads up Yarrow and Etterick, a good part of which are now finiſhed; and alſo in cutting a new line acroſs the county, and through Peebleſhire, thereby opening up a more direct communication with Mid-Lothian, whence all our lime, coal, tar, &c. are procured, and to which the ſurplus of the county produce, is uſually ſent. When this road is finiſhed, it will lower conſiderably the expenſe of lime; this article,

ticle, in many parts, ſtanding the improving farmer not leſs than 15s. or 16s. per cart load of two bolls, or twelve Wincheſter buſhels. None of your reporters have, as yet, ſaid any thing about the dog-tax. In this county, it is enforced with all the energy that an act of the Legiſlature deſerves; and ſix ſhillings are levied from every ſhepherd for one, and double that ſum if he keeps two dogs; even cow-herds do not, in every inſtance, eſcape. Whether the ſhepherd's dog was originally intended by the Legiſlature to be taxed, ſeems dubious; the act in different counties being variouſly interpreted; and in ſome no collection of this kind have been made at all. Every man in his Majeſty's dominions, to be ſure, ought to bear his ſhare of public burdens; but where is the juſtice in ſubjecting one part of the community to a tax, from which another is entirely exempted?——*Jan.* 16.

Argyleſhire Quarterly Report.

HIGH winds and heavy rains, is the ſhort account of our winter here. We had an abundant crop, and now have plenty of time to thraſh it out, as little can be done without doors. The rents of our land are riſing, though their produce and the price of cattle are on the decline; from which it may be inferred, that the ſpirit for farming and grazing is much alive among us. Butcher meat is about 5d., meal nearly 2d. the Engliſh lib.: butter from 12. to 14d., and cheeſe 5d., the Tron lib.; for our weights and meaſures are as various as in other parts of the kingdom; and by a ſtrange whim, different, in different commodities. Oats, being of various qualities, ſell, as uſual, according to the value of the meal which they are eſtimated as likely to produce. Bear, in the diſtrict in which it forms the principal article for ſale (Kintyre), is become of little value. Thoſe who take it in, will make no price till they ſee whether, or how, they can diſpoſe of it. Thus, the merchant is ſecure, and the farmer muſt take his chance. If any of our patriotic legiſlators look at the FARMER'S MAGAZINE, one might humbly remonſtrate on the impropriety of claſſing this diſtrict (in the Diſtillery Act) with the low counties of Scotland, when all its grain could hardly ſuffice for one large ſtill, nor all the capital it could afford for ſuch a buſineſs, ſuffice to pay the duty, or ſet it agoing. It will perhaps be ſaid, that the farmers may export their grain. But in a ſtripe of a county forty miles in length, with only one ſhipping port, poor farmers, with poor horſes, will rather take any thing at their door, than drag ſo heavy a commodity to the diſtance of perhaps twenty miles. The conſequence is, that hundreds of poor creatures, who have nothing to loſe, will attempt to ſmuggle it into whiſky, and help to ruin the health and morals of themſelves and others. Where, then, it may be aſked, is the juſtice or wiſdom of denying this diſtrict ſmall legal ſtills, as allowed in the other parts of the Highlands? or where is the policy of loſing from 10,000l. to 15,000l. a year, that might thereby be added to the public revenue, and that without incurring one penny of additional expenſe to Government?——*Jan.* 17.

Banffſhire Quarterly Report.

THE weather was more than ordinarily propitious for every kind of

work during this quarter; consequently labour is well advanced, and seasonably performed. From the uncommon mildness of the two preceding months, wheat lately presented a more vigorous appearance than usual; but some bare frosts, a few days ago, gave it a severe check. This grain is now more extensively cultivated in some of the fertile districts near the coast, than barley, but has not been much tried in the interior of the county. The crop is turning out as to quantity nearly about an average; but, as was apprehended at the date of last report, the oats are, in many instances, short in meal two pecks per boll. About two months ago a brisk demand took place for grain, and considerable sales were made; a fortunate circumstance, as money was much wanted at term time. Wheat mostly all sold at 33s. and 35s. per boll; a great quantity of old oats at 18s. and 20s.; and barley from 23s. to 25s. But prices have declined very much for some weeks past. Barley is now little more than 18s. and 19s.; and common oats 15s. and 16s. Little change has taken place in the price of live stock. A full supply of beef and mutton in the market, at 5d. per lib. Dutch. Since the introduction of turnips by the late Earl of Findlater, a great supply of well fed cattle went regularly to Aberdeen from Banffshire; but the turnip husbandry extending so much in that county, and there being little consumpt at home, obliged the farmers to relinquish stall feeding, and give their turnip to young cattle; and as considerable attention is paid to this branch, a set of choice three year old stots will generally be found in high condition, however soon the dealers may be able to commence business in the spring. On the 25th *ultimo*, the most tremendous gale of wind came on that has happened for 20 years, which occasioned considerable damage; houses were stripped of thatch; ricks of corn, and stacks of hay, turned over; and a great number of trees torn up by the roots. The gale subsided towards night, and fortunately did not occasion more serious damage.——*Jan.* 17.

Aberdeenshire Quarterly Report.

During the bygone quarter, the weather has been uncommonly fresh and open for the season, with frequent falls of rain, and some very heavy gales of wind. Of this last, the 25th December furnished a sample which will not be soon forgotten, unroofing houses, overturning stacks of corn and hay, breaking trees, and tearing them up by the roots, &c. &c. Little interruption has been given to field work this winter, or to the taking up of turnip regularly for cattle. Of course, the labouring is far advanced, and the cattle have thriven exceedingly fast; but the turnip in general is pretty far consumed, and with many will not last till the cattle go to grass. Both bear and oats turn out well under the flail, and are generally of good quality; the market for both has been pretty steady; Bear, 20s. to 24s. per boll; Oats, 17s. to 20s.; and Oat-meal, at 18s. and 20s.; at which prices, a very considerable quantity has been bought and shipped off. Fat cattle have sold readily from 8s. to 9s. per stone, sink; and lean stock have had plenty of purchasers at a fair value. Very little alteration in the price of labour from last year's rates in any department. The malt tax, which has been exact-

ed

ed with rigour, comes to be a very ſerious aſſeſſment. It ſeems to be a determined point, that the Scotch big, though far inferior in value, ſhall be equal in point of duty to the Engliſh barley! This, with the uncommon ſeverity againſt ſmugglers, whilſt no ſmall licenſed ſtills are permitted to work in the county, forms matter of contemplation, at leaſt, to many of your numerous readers.—— *Jan.* 22.

Tweeddale Quarterly Report.

HARVEST in this county being generally begun on the ſecond week of September, and finiſhed about the firſt week of October, the weather was more favourable than in lower diſtricts; conſequently, the grain crops of every kind were brought to the ſtack-yard in the compleateſt order and condition. The crop being much deficient in bulk, a ſcarcity of fodder was feared; and notwithſtanding the uncommonly freſh winter, that fear will in many caſes be realized. Live ſtock of all kinds, depending on the paſtures, have perhaps never been better ſupplied, vegetation through the whole winter never having got a check; and at this time the paſtures are more verdant than, in the two laſt years, at the end of April. The winter, however, having been uncommonly windy and wet, the feeding ſtock have not come on well, eſpecially where ſheep were flaked on the turnip fields, and had not liberty to retire to adjacent graſs lands, which, in wet ſeaſons or ſoils, is of great importance. No animal takes worſe with lying in puddle than ſheep. To ſupply cattle at the ſtall with turnips was often an arduous taſk, it being extremely difficult to cart the turnips from the land, without poaching it ſo much, as to injure it ſeverely for the ſucceeding grain and graſs crops. Turnips have, however, been preſerved in the beſt condition by the freſhneſs of the ſeaſon, except that in many inſtances they have run to ſeed. Owing to the openneſs of the winter, field labour for ſpring crops is in many places almoſt finiſhed, but much of it in a very imperfect manner. As we had ſeldom two dry days together, nothing but lea could be laboured to purpoſe.

From the preference given by diſtillers and brewers to Engliſh barley, the ſowing of that grain has been much diſcouraged, many of the farmers in this county having laſt year, and eſpecially this year, ſown conſiderable quantities of wheat, which, ſo far as the experiments have gone, turned to good account; and at this time of the ſeaſon, what was ſown is looking well, and, ſhould the ſpring months prove favourable, promiſes every manner of ſucceſs. Wheat here is ſown either on clover lea, with one furrow; or, after turnip, eat off with ſheep, or carted from the field, and ſtored for ſtall feeding; which practice was laſt year carried on with great advantage almoſt through the whole of winter, the wheat being ſown as the field was cleared.

The young graſſes are looking well, and may be expected to ſupply the deficiency of laſt year's hay crop, which was little more than half of an average one. Where ſales have been made of the feeding ſtock, the profit obtained has not been great; little more than 8s. per ſtone, ſinking offal, having been got. Though they pay a little better than laſt

year,

year, being bought in at lower prices, yet this is not sufficient to indemnify for the present high rent of land and expense of farming. The grain crops are turning out in the barn enough for the bulk, but not for the quantity of ground sown. The oats will not come near an average; the barley not much below an average; but the peas are not half a crop. Our markets have continued through winter without much fluctuation; for some weeks past they have rather looked up. The present prices are, for Common or Blainslie Oats, 19s. to 20s. per Lothian boll; Potatoe ditto, from 20s. to 21s. 6d. per ditto; Barley, from 26s. to 28s. per ditto; Bear or Big, from 24s. to 25s. per ditto; Peas, a scarce article, from 20s. to 21s. per ditto; Wheat, 40s. per ditto. The Hay is mostly sold at 9s. and 10s. per stone, of 23 English pounds, for the Edinburgh market, our distance from that place being from 16 to 26 miles, which accounts for the price being much inferior to the metropolis, as the purchaser drives it at his own charge.

The farming interest in this county, and I believe every where else, is universally dissatisfied with the principle by which the Property-tax is assessed. It requires little penetration to discover that the *datum* or principle on which that tax is assessed on the occupiers of land is fallacious in the extreme, as it plainly supposes that the half of the free produce of all the landed estates in Scotland goes into the farmer's pocket. That the tack-duty, or land rent, however high it is stretched, goes into the proprietor's pocket, nobody doubts; and the *per cents* imposed thereon, as their share of the tax, is fair. But that the half of the tack-duty or rent goes into the farmer's pocket, is in a thousand cases to one, so absurd and fallacious, as not to require a single argument in refutation. In all cases where the tax is imposed posterior to the taking of farms, it must operate as an *ex post facto* tax, on which the farmer could make no calculation when taking his farm; and even in more recent cases, where the farms have been taken since the tax was first imposed, the lessee could not know what he had to pay, additions being made almost every session of Parliament, which could not be foreseen till they were imposed. That no application has been made to Parliament on the part of the farmers against the principle of the bill, as it applies to their case, is wonderful indeed, and cannot fail to confirm the financier of the justness and equability of the tax; though, had the case applied to the manufacturers of cotton or pig-iron, the deafest ears in Parliament would have been stunned with their complaints. That a respectable body of men, who have in their possession, and under their management, almost the whole estates in Great Britain, should be marked out from the rest of the community, and made to bear a larger share of public burthens than others, is a circumstance to many inexplicable and mysterious, and not to be accounted for upon any rational or satisfactory principle.——22*d January.*

Mid-Lothian Quarterly Report.

In former reports, the versatility of the weather has been frequently noticed; but that portion of the current quarter preceding New-Year's-day

day may be better characterized by its conſtant and inceſſant wetneſs: perhaps not one ſingle day and night elapſed without a torrent of rain, ſometimes accompanied with uncommon high winds, which has done conſiderable damage in different reſpects.

The ground was ſo very wet, as to put ploughing as completely at a ſtand as if it had been ſtopt by ſevere froſt. Indeed, the ground was ſo drenched, that an honeſt neighbour undertook to demonſtrate that the earth was wetter than it poſſibly could have been after the univerſal deluge in the days of Noah. Since the commencement of the new year, the plough is buſy in turning over graſs grounds for the enſuing crop.

The markets are kept well ſupplied, both with corn and cattle. The country ſeems full of the latter; and it has required ſo much ſtraw to keep them dry, that it is doubted whether ſuch large ſupplies of grain can be furniſhed to the market for any length of time as has lately appeared. The ſtack-yards were not large at the beginning of the ſeaſon; but now they may be ſaid to have aſſumed a pigmy appearance. Oats, as expected, are found deficient, and yield from one to two pecks of leſs meal than in ordinary ſeaſons.

The new ſample market at Edinburgh does not ſeem to take well, and ſerves little elſe than to exhibit the qualities of the grain in the hands of the different corn merchants who attend it. This the merchants do not repine at, as they afterwards meet with purchaſers in private, who have ſeen what may ſuit them. To ſtate the difficulty of introducing new cuſtoms as a reaſon, is ſaying but little; but the following, amongſt other cauſes, may in ſome degree account for the backwardneſs of one claſs of purchaſers.

For years paſt, the price of bread at Edinburgh has been exempted from the fetters of an aſſize; and perhaps the community has ſuffered nothing by the exemption, every baker being at liberty to ſell his bread at what price and degree of fineneſs he chooſes; of courſe, thoſe who ſell the beſt bread, and moſt reaſonably in proportion to its quality, have the greateſt run for it.

But by the regulations of the market, a certificate of every boll that is ſold, and at what price, muſt be left with the clerk of the market, for the inſpection of the Magiſtrates. By theſe prices it is conjectured the Magiſtrates may in time aſſume their power of regulating the aſſize of bread: hence, the bakers, who are the mealmen in this country, and purchaſe privately, which of courſe will diſappoint ſuch a meaſure, keep aloof. Price of the quartern loaf, 1s. —— *Jan.* 23.

Roſs ſhire Quarterly Report.

During the preceding quarter, we have had much wet weather, but uncommonly little froſt or ſnow.

Cattle on turnips, have not been obſerved to make much improvement, owing, no doubt, to the conſtant humidity and chilly ſtate of the air, which muſt be injurious to thoſe fed looſe in open courts and ſhades, except where plenty of litter can be furniſhed, which is rarely

the

the caſe in this county. There having hitherto been no ſnow ſtorm, has, in all probability, enſured a plentiful ſupply of fodder for the winter. The turnips keep free of rotting, but do not ſtand ſo much eating as laſt year.

Although the corn of this county was unuſually well harveſted, and of courſe early ready for ſhipping, yet little was done in that trade till the beginning of the preſent month. The ſituation of the continent led the farmers to expect higher prices than markets yet warrant. And it will appear from the annexed quotation, at which conſiderable ſales have been made, how far they have ſucceeded in bringing the buyers over to their opinion.

Wheat *per* Linlithgow boll - -	35s. to 37s. 6d. & 40s.
Barley *per* Roſs-ſhire boll - -	26s. — 27s.
Potatoe oats *per* do. of 5 firlots - -	25s — 26s.
Common do. *per* do. of do. - -	20s. — 21s. & 22s.
Oatmeal *per* boll of 9 ſtones Dutch -	22s. — 24s.

23. *Jan.*

Letter from Falkirk, Jan. 24.

'We have had an ample ſhare of the wet weather that appears to have prevailed very generally during a great part of laſt quarter; and in conſequence of our clayey ſoil, low-lying flat land, with ſcarcely any declivity for carrying off ſurface water, ſhall feel its ill effects proportionally long.

'Although the ſtate of the weather has kept the plough almoſt idle with us for ſome time, yet as a great part of the land uſually ploughed here was turned over immediately after harveſt, before the earth was ſoaked with moiſture, ploughing can ſcarcely be ſaid to be very far behind. Little rain has fallen ſince the beginning of the preſent month; but the froſt has been ſo inconſiderable, that much of the important buſineſs of carting out manure yet remains to be done. The weather, though wet, has been very mild, and conſequently early ſown autumn wheats, (the general and neceſſary practice with us) are unuſually far advanced. What may be the conſequence to the coming crop, of this uncommon forwardneſs, at ſo early a period, muſt depend on after circumſtances; at preſent, it is healthy, vigorous, and thick on the ground. The idea given in laſt report, of the grain crops, turns out pretty correct. Wheat does not make a return on the barn floor equal to its great bulk in the ſtack-yard, owing to an unuſual quantity of light grain; and the quality is greatly inferior to laſt year. Oats, particularly the potatoe kind, are not generally conſidered as mealing well; but I cannot ſay this is the caſe with thoſe grown on my own farm, which yield fully as well at the mill as thoſe of laſt year. In our market, wheat, owing to the great proportion of inferior quality, cannot be ſtated above 36s. per boll, Linlithgow ſtandard meaſure; Barley 30s.; Beans 23s. per Stirlingſhire meaſure; Oat-meal 17d. per peck. Our butcher market has been well ſupplied, with little variation of prices. Owing to the open ſeaſon, and no very tempting prices, under all the exiſting

exiſting circumſtances of the times, the ſtack-yards are fuller than uſual at this period; indeed, ſuch a conſiderable quantity of laſt year's produce remained when the preſent crop came in hand, that little of it, comparatively, was thraſhed out before December; and no motive, beyond a temporary ſupply of fodder for the cattle, urged to any great exertion in this way. The general opinion, indeed, ſeems to be in favour of higher prices ere long, probably from an idea that the only ſource of ſupply to which we can at leaſt for ſome time reaſonably look, is our home produce; and it is indeed the only real one to which we ought to accuſtom ourſelves, at all times, to look with confidence for our daily food. The improved ſtate of agriculture embracing in its ſcope a more extended cultivation of wheat, to the great benefit of the public, as well as the individual, in ſpite, too, of injudicious obſtacles, and antiquated notions about the ſcourging effects of that crop, warrants us in placing dependence on our home produce for the firſt article of neceſſity. The almoſt incredible riſe of rent that is daily taking place, however it may ultimately affect thoſe who engage to pay it, muſt neceſſarily enſure an increaſed ſupply of the moſt valuable bread corn, as it is from ſucceſsful crops of wheat that ſuch are to be paid, if paid at all. When on the ſubject of riſe in rents, I beg leave to ſtate an inſtance that has recently occurred, which will ſhow the ſuperiority of an advertiſement in a newſpaper, of a roup, over an opinion from the higheſt authority in agricultural matters. A farm, by no means of the beſt ſoil, in a neighbouring diſtrict, ſurveyed by diſtinguiſhed agriculturiſts (one of them the learned Profeſſor of that ſcience at Edinburgh) who, as I am informed, conſidered 4l. per acre as a ſmart rent for the premiſes, (and indeed ſome of the moſt intelligent farmers in the immediate neighbourhood, long and well acquainted with the nature of the farm, thought theſe diſtinguiſhed judges had even ſtretched the point); nevertheleſs, and as if every rational opinion on theſe matters were now to be ſet at defiance, forward ſteps a tenant, and gives 4l. 17s. 6d. per acre. The very Property-tax to be paid by the tenant, would, little more than half a century ago, have been thought a good rent for the farm, but which may, perhaps, now-a-days, be overlooked as an item too trifling to be taken into the eſtimate.—We ſhall certainly ſoon ceaſe to be ſurpriſed at any thing of this kind, it is become ſo much the order of the day.'

Forfarſhire Quarterly Report.

THROUGHOUT the preceding quarter, the weather has been uncommonly variable, and a conſiderable quantity of rain has fallen. As the froſts have not been ſevere, with ſcarcely any ſnow, field labour in moſt places is well advanced; and the early ſown wheats, on well prepared land, have a freſh and growing appearance. Thoſe later ſown have not ſo promiſing an aſpect.

The grain markets have been tolerably ſteady, and the demand good. Wheat, during the ſeaſon, may be quoted at from 35s. to 40s. per boll; ſome fine ſamples perhaps higher. Barley has rather declined of late.

Current

Current prices ſince November for good grain 25s. to 28s.; Oats 20s. to 23s. per boll.

Turnips are beginning to ſuffer a little from the froſt: they have turned out a better crop than once ſuppoſed. As there are a number of ſpecies of turnips, and thoſe of different qualities and weights per acre, it would be obliging if any of your correſpondents, who have tried by *experiment* the different varieties, would communicate which they moſt approve of, and the reaſons why; as it muſt be of conſiderable importance to thoſe who raiſe turnips on an extenſive ſcale, to know the moſt valuable kind.

Cattle for wintering ſold pretty high, and in general are in good condition. As the weather has been open and favourable, a ſcarcity of provender is not now feared.——*January 24th.*

Berwickſhire Quarterly Report.

We had a great deal of rain during the two firſt months of this quarter, attended with an uncommon mildneſs of the atmoſphere, and frequent high gales of weſterly wind. Since Chriſtmas, however, the weather has been comparatively dry; little ſnow has yet fallen; and the few froſts that have taken place, have been very tranſient; ſo that vegetation has hitherto experienced no material check.

Winter wheats and young clovers have a freſh appearance, and ploughing is in a forwardly ſtate. Paſtures have exhibited a continual verdure; but, in ſituations any way liable to rot, there is reaſon to fear, that the long continued moiſture has been injurious to the flocks. Feeding ſtock has thriven well; and turnips, upon dry ſoils, have improved much ſince laſt quarter: the letting price for thoſe of good quality, has been from ſix to eight guineas an Engliſh acre.

Home bred cattle for wintering, met with a heavy ſale at all the Martinmas markets, and at prices from 15 to 20 per cent. lower than laſt year; while thoſe of the Highland breed ſold currently at a reduction of only 10 per cent. Indeed, from the ſuperior eſtimation in which Kyloe beef is held in our butcher markets, the number of cattle bought in from the Highlands, to be wintered and fed off in this county, is now very conſiderable, having been annually increaſing for ſeveral ſeaſons paſt; a circumſtance which certainly merits attention from thoſe concerned in the breeding line. There has been little fluctuation in the fat market ſince laſt Report; cattle have ſold from 6s. to 7s. per ſtone, ſink; and ſheep from 6d. to 7d. per lib. do. Engliſh weight.

With reſpect to the grain crops, thoſe of wheat and barley, when compared with the produce per acre laſt year, fall ſhort no leſs than from 20 to 25 per cent. Oats alſo are from 16 to 18 per cent. deficient, and from half a ſtone to a ſtone per boll ſhort in mealing. But it ſhould be recollected that crop 1805 was conſiderably above an average one.

Corn markets have rather declined a little ſince the middle of December, and barley ſtill continues to experience a dull ſale, though the quantity now cultivated is hardly a fixth part of what it was ten years ago. Prices at Berwick market, January 24th, were, Wheat, from 48s. to 55s.; Barley, from 20s. to 22s.; and Oats from 19s. to 22s. per boll of ſix buſhels.

The

The truſtees appointed by the Road act of 1802, with a laudable attention to the improvement of the county, have it at preſent in contemplation to erect two wooden bridges acroſs the Tweed, one at Norham, and the other at New-water ford; which will greatly facilitate the communication with Northumberland, from whence we are chiefly ſupplied with the articles of coal and lime.

Perſons willing to contract for theſe bridges, have been requeſted to lodge plans and eſtimates, as ſoon as poſſible, with George Logan, Eſq. at Fiſhwick, by Berwick, to whom application may be made for further particulars; or with George Peat writer in Dunſe. ——*Jan.* 26.

Fifeſhire Quarterly Report.

In this county, immediately on the concluſion of harveſt, a tract of rainy weather enſued, and the winter has continued open, without either froſt or ſnow, to this date, with the exception once or twice of two or three days hard froſt, ſucceeded by rain and high gales of wind. The conſequence has been, that much land, prepared for wheat, could not be ſown; and, upon wet farms, autumnal ploughing could not be carried on; and all field labour, from the extreme wetneſs of the ground, retarded, which muſt throw a weight of labour upon the farmer, in ſpring, too heavy to accompliſh in due time. This remarkably open weather has been favourable to the turnip crop, as there has been no froſt to rot them; the paſture fields continue green, and the young ſtock have paſtured during winter without interruption. By this means, there will not be a ſcarcity of ſtraw. Prices of grain have continued pretty ſteady, but, during this quarter, have rather declined. Barley, 25s.; Oat Meal, 22s.; Wheat, from 35s. to 38s. per boll. Potatoes were a fine crop; indeed, ſo abundant, that there is no market for them, even at 5s. per boll: the farmer muſt apply theſe to feeding cattle. Oats have turned out conſiderably inferior to laſt year: there is therefore reaſon to believe that oat meal will rather riſe than fall, from the deficiency in quantity. The wheat ſown before the weather broke, has a moſt favourable appearance; but the quantity ſown is much inferior to what was intended, had it been practicable to go on with the ſeed proceſs.——*Jan.* 26.

Extract of a Letter from the Diſtrict of Carrick, Jan. 26.

'The rains have been more conſtant of late, and of longer duration, than has been known in the memory, I believe, of any perſon living. From nearly the middle of October to this time (except two or three days when there was a little froſt), it may be ſaid, without any exaggeration, that we have not had a ſingle twenty-four hours without rain in ſome part of it, accompanied with frequent violent ſtorms, and no ſymptoms at preſent of any alteration. The earth, in fact, can ſcarce well be ſuppoſed more completely drenched than it is at preſent. And this ſtate of the weather, ſo injurious to the health of the human body, has been very unfavourable for the purpoſes of agriculture. Scarce any more than half the ground that was intended for wheat has been got ſowed. There are few places where dung could be led out; and to attempt to plough was in vain, while the earth nearly reſembled

a mortar tub. And, beſides this immediate effect, one might be apt to dread the conſequences to the enſuing crop, on account of the ground being in danger of ſouring from ſuch a long continued rain. The ſame weather, however, that was ſo injurious to tillage ground, has been favourable for paſture, by preſerving it green, and in like ſomething of a growing ſtate. And the turnips, at ſame time, not having been injured by a ſucceſſion of froſts and thaws, has allowed the cattle, whether in the houſe or the field, to receive the full benefit of them.

'The ardour of the farmers, ſince the commencement of this quarter, has been conſiderably damped. The grain market, contrary to every expectation, has rather declined than advanced. The oatmeal has been long ſtationary in the market of Ayr at 2s. 8d the ſtone, which is ſomething leſs than it was ſome time ago. Other grains have declined in proportion; ſo that while the ſtate of the laſt crop, and the general ſtate of Europe, led them to expect an advance before this time, their immediate views have not been realized, though there is great reaſon to ſuppoſe that their wiſhes will be fully gratified, before many months elapſe. There has been ſtill a greater fall in the price of black cattle than of grain. Cattle fit for the Engliſh market have declined from 30s. to 3l. a head; and many a man, ſpeculating upon the proſperous ſtate of the country towards the end of harveſt, has been much hurt by this ſudden fall. Sheep did not altogether ſuffer in the ſame proportion; for this good reaſon, that the greateſt part of the ſale ſheep through the moors of Carrick, were bought up before the fall in the price of cattle took place. The price of butcher meat in the ſhambles has kept pretty ſteady through the ſeaſon; ſo that whatever loſſes have been ſuſtained, they have moſtly fallen to the lot of the grazier and the feeder; for, in conſequence of the fall of from 20 to 25 per cent. in the price of ſheep and lamb ſkins, and from three-halfpence to twopence per pound in the price of hides, the butcher could not afford the ſame price as formerly. It is very fortunate for the farmer that he is not eaſily diſcouraged, otherwiſe ſuch rubs as theſe would drive him to deſperation: the ſame cheerful and animating principle invigorates his mind that gives life and ſpirit to the Chriſtian, 'and becomes as an anchor to his ſoul, both ſure and ſtedfaſt.' He knows that ſeed-time and harveſt will continue while the world laſts; and that while men remain upon the earth, they muſt have food and raiment: and, by ſteadily acting on theſe principles, though he may be diſappointed in his expectations for a little while, yet, in full *hope* of better ſucceſs in his next attempt, he commences his labour with as much vigour as if no accident had happened. And what heart can be ſo cheerleſs as not to wiſh him ſucceſs! His labours are for the good of mankind, from the king to the beggar.

'Farm-ſervants, day-labourers, mechanics, and contractors for dikes, roads, &c. being in as great demand as ever, the price of their ſeveral labours are ſtill rather advancing than otherwiſe; and this, perhaps, you will be diſpoſed to allow, is as good a criterion as any other of the progreſſively improving and proſperous ſtate of the country. No doubt, much has been done in the way of improvement, but much yet remains

to

to do; and, while that is the caſe, it is to be expected that the price both of land and labour will continue to advance, till ſuch time as improvement ſhall be brought nearer to its *acmè*.'

Dumfrieſſhire Quarterly Report.

THE weather, for the laſt three months, it is believed, has been unuſually mild and open over the whole kingdom. In this county it has been extremely ſo, with falls of rain pretty frequent, but not exceſſive. In dry grounds, the operations of the plough have been carried on with little or no interruption; and the ſtate of ordinary labour is now in ſuch forwardneſs, that ſo ſoon as the grounds become dry, the ſpring ſeed may generally be ſown. The quantity of wheat ſown appears greater than uſual; and what was got in within the month of October, is well rooted and healthy.

In this county, where the keeping of young cattle is an eſſential object, the general apprehenſion of a ſcarcity of fodder made the farmers ſo backward in thraſhing out their corns in the beginning of winter, that an unuſual proportion ſtill remains on hand, and the want of *keep* is not now much dreaded. The crop of barley has thraſhed out well, and equal to expectation, both in quantity and quality. This is not the caſe with the crop of oats. Farmers, from the filling ſeaſon having been warm, expected abundant returns; but to make unuſual fertility, it may be obſerved, that warmth without drought is not ſufficient. Wheat had the appearance of a great crop; but was generally affected both with ſmut and mildew. The ground, however, appears to have yielded largely as to quantity.

The cattle markets, which had fallen in autumn, quickened again in the early part of winter; and dealers to the South have come off better than was expected. They have now begun to buy ſtrong cattle, to be driven early in the next month. Turnips have been got the full uſe of hitherto, and turned out a larger crop than expected; but from frequent rains, the texture of the root muſt be ſo looſe, that if ſharp froſts were to take place, they muſt fail immediately. The earlier they are uſed or got up, the greater will be the benefit got from them. Of late, the practice of giving turnip to the ſtrong cattle intended to be driven ſouth in the ſpring, has become general. The turnips are given in the field at mid-day, and the cattle driven out of the ſtraw-yard for that purpoſe; a practice found particularly advantageous, becauſe it furniſhes the cattle with more ability for travelling than when kept cloſe in the yard.

Sheep ſtocks in the high grounds have ſuſtained no damage this ſeaſon. They are yet ſtrong and healthy, though, from the wet ſeaſon, it is feared that thoſe upon wet paſtures may ſuffer in ſome degree by the rot. From the South, we hear already of commiſſions to purchaſe ſheep from eſtabliſhed ſound farms.

Prices.—Barley in the autumn began at 5s., but ſoon came down to 4s. the Wincheſter buſhel, at which it ſtands. Wheat is now from 8s. to 10s., and oats from 2s. 6d. to 3s. Potato oats 3s. 4d. Oatmeal

2s. 8d. the ſtone. Beef and mutton from 4d. to 6d. the pound avoirdupois. Pork in the carcaſe 5s. 9d. the ſtone of 14 lib.——*Jan.* 27.

Letter from Glaſgow, 27th January.

'SUCH a long and continued tract of wet weather as we have experienced during the winter, has ſeldom been witneſſed in this part of the country. Scarce can we ſay we have had a dry day during the whole of the laſt three months. In conſequence of this, very little wheat has been ſown on the potatoe ground, and little out-door work carried on. We fear the ground will not be in a proper ſtate for receiving the ſeed for a conſiderable time to come. Since laſt letter of intelligence, our market has been, upon the whole, pretty ſteady.

'Our ſupplies of grain, of every ſort, have been abundant. The old wheat has come principally from America *via* Liverpool; oats from the ſouth of Scotland, and from Ireland; and barley from Norfolk, and the north-eaſt of Scotland. Annexed you have a ſtate of our markets.'

State of Glaſgow Markets, 27th January.

Dantzic Wheat	44s. to 47s.	per boll Linlithgowſhire meaſure.
Foreign Red do.	38s.—44s.	
Scotch do. (Old)	43s.—44s.	
Do. do. (New)	38s.—41s.	
Engliſh do.	42s.—44s.	
American do.	45s.—47s.	do. of 240 lib.
Iriſh do.	36s.—40s.	
Iriſh Mealing Oats	22s.—23s.	do. of 264 lib.
Do. Inferior do.	18s.—20s.	
Scotch Potato do.	24s.—26s.	do. Renfrewſhire meaſure.
Do. Small do.	18s.—20s.	
Engliſh Potato do.	none.	do. Stirlingſhire do.
Do. Small do.	do.	
Engliſh Barley	36s.—38s.	do. do. do.
Scotch do.	28s.—30s.	
Iriſh do.	30s.—00s.	do. Renfrewſhire do.
Engliſh Beans	none.	do. Stirlingſhire do.
Scotch do.	24s.—27s.	
Engliſh Grey Peas	none.	do. do. do.
Scotch do.	22s.—24s.	
Scotch Oat-Meal	23s.—24s.	do. of 140 lib.
Iriſh do.	none.	
Fine Flour	66s.—68s.	Sack of 280 lib.

Kincardineſhire Quarterly Report.

THE heavy rains that we had in the end of November and beginning of December, have been ſucceeded by a tract of the mildeſt open weather ever remembered, but accompanied by ſome of the ſevereſt gales of wind experienced in this country. The open weather has allowed farming operations to be got forward in ploughing, carting of dung, making up dunghills, &c. &c.

Markets for grain have been briſk in demand, and of late pretty ſteady in price. Wheat, 40s.; Barley, 27s.; Bear, from 22s. to 22s. 6d.

c;

Potato Oats, 23s.; Common Oats, from 18s. to 19s. per boll. A conſiderable quantity of grain has been ſhipped for different ports in England and ſouth of Scotland.

The crop has turned out better than was expected; but by no means equal to laſt crop; and had not the diſtillers in the Frith of Forth taken off a great quantity of bear, I ſuſpect much of it muſt have remained on hand, as it was of a very inferior quality.

Cattle markets have been ſtationary, and, unleſs for fat cattle, there has been no demand. Sheep have declined in price, although in the butcher market they ſtill keep up the price of meat. Horſes, particularly good ones for draught, are ſcarce, and high priced.——*Jan* 27.

Dumbartonſhire Quarterly Report.

DURING the months of November and December, a moſt extraordinary quantity of rain fell, uninterrupted by almoſt any interval of fair weather. Since January commenced, although there has been very little froſt, the rain has been in moderate quantities. Such a long tract of ſouth and weſt wind has not occurred in the memory of the oldeſt perſons here: it having blown from theſe points, with little variation, ſince the thunder ſtorm on 9th July laſt, till now, except fourteen days of fine dry eaſt wind in October. This long continued wetneſs has been very puzzling to the wheat ſowers. Much of that grain has been ſown in an unſatisfactory manner; and much has not been got ſown at all. The braird, at preſent, does not ſeem to have ſuffered much, except on ſome wet ſpots where it failed from the rotting of the ſeed. The open winter has been favourable for ploughing, which, in ſeveral places, is well advanced; but many farmers here do not ſeem to be aware of the advantages reſulting from this practice. It muſt however be confeſſed, that our ſituation is unfavourable for early ploughing; the wet, high, and hanging lands here, being ſeldom in a fit ſtate to receive the plough with advantage during the winter months; and it is proper to be guided by experience in aſcertaining how far it may be carried with advantage.

The crop now in hand turns out as well as could be expected, from the ſtate of the weather in harveſt, and the latter part of ſummer. The quantity will come up to an average; but the quality is inferior to the grain of laſt year. Wheat is lighter, by ſome pounds, in the firlot, and thicker in the ſkin; but in other reſpects generally ſound, and free of ſmut. Oats yield only from fourteen to fifteen pecks of meal from the boll. The cattle markets have not been briſk of late, either for fat or lean ſtock. During the laſt month of the year, vaſt flocks of ſheep were driven from the Highlands, which glut the markets; and this muſt not only continue, but will increaſe. Hitherto the demand for ſheep from the ſouth, to ſtock the new ſheep farms in the Highlands, has taken many from the market of conſumption; but when theſe demands for ſtock ceaſe, and the Highlands begin to pour forth their increaſed annual ſtores, the price muſt be reduced. This ſeems to point out that the farmer's increaſed attention ſhould be directed to the raiſing of the moſt valuable grain, as the beſt means of diſcharging his rent and other increaſed demands.

Markets for grain have continued pretty ſteady during laſt quarter. The wheat raiſed in this diſtrict is ſold in Glaſgow, as there are no flour-mills nearer. Notwithſtanding of the extenſive ſale and conſumption of every kind of grain in Glaſgow, it is a fact hardly to be credited, that there is no ſuch thing as a regular market eſtabliſhed for the ſale of grain there, either in bulk or by ſample. This neglect ſhould be ſpeedily remedied by the magiſtrates, as unworthy of ſuch a place; elſe many ſmall towns in Scotland will get before it, in a moſt obvious and neceſſary improvement.——*Jan.* 27.

Letter from a Gentleman near Langholm, Jan. 27.

'The weather, during the laſt quarter, has been remarkably mild and open; and a greater quantity of rain has fallen during the preſent winter, than I have ever witneſſed. Indeed, there have been very few intervals of dry weather ſince Martinmas, except a few froſty days about the beginning and middle of the preſent month. The ſoil being ſo completely ſaturated with water, has prevented the operation of ploughing from being ſo far advanced as might have been expected in ſuch an open ſeaſon. The turnip crop, a great part of which is now conſumed, has been got without much loſs; but the fields have been greatly poached where the crop was carted off, from the wet ſtate of the ſurface. Thoſe let for feeding ſheep have fetched high prices per acre. The young clover plants had a very promiſing appearance at the end of autumn; but they have been much injured of late, eſpecially on wet ſoils, being thrown up to the ſurface, owing to the ſudden tranſition of the weather, from heavy rain to ſevere froſt, in which ſituation a number of them muſt periſh.

'Our grain and meal-market has remained pretty ſteady during winter, the ſupply having kept pace with the demand. The crop, in general, may be reckoned equal to an average, though it has not fully anſwered our expectations from its bulk in the ſtack-yard. Hay, which was generally a deficient crop, has, however, not riſen much in price, owing to the mildneſs of the ſeaſon; though a greater proportion of black cattle have been kept as winter ſtock than uſual, the demand for theſe having been very low at Martinmas.

'Though the tops of the hills and high lying grounds are at preſent covered with ſnow, yet the ſheep ſtocks have at no time during winter been pinched with hunger; but from the heavy rains to which they have almoſt daily been expoſed, they are not generally in ſuch a thriving condition as they have frequently been at this period of the year, even during a harder winter. If the ſpring ſhould not turn out favourable, ſome loſs may be expected.

'The wool trade, ſince the uſual channel of conveying our manufactures into the Continent, by way of Hamburgh, has been cut off, has received a very conſiderable depreſſion; and the dealers in that article ſpeak of heavy loſſes they are likely to ſuſtain. From the great demand and high prices given for wool for ſome years back, the value of ſheep, particularly thoſe of the Cheviot and fine wooled kinds, has greatly

greatly advanced of late. It is to be feared, however, that ſtock of this kind may experience a ſimilar depreſſion in conſequence. But the landlord, and the tenant likewiſe, it would appear, proceed on a different ſuppoſition, namely, that things ſhall go on in a regular, or rather accelerated progreſs of advance, for rents continue uniformly to riſe on the expiry of every leaſe.'

Inverneſſſhire Quarterly Report.

THE winter quarter, now nearly at a cloſe, though rather wet, has proved uncommonly mild; and, except two days of ſlight froſt and ſnow, which even did not interrupt ploughing, the weather anſwered for executing every branch of field work ſucceſsfully. As may be expected from theſe circumſtances, turnips are ſhooting rapidly; and if a check is not afterwards met with, it will be neceſſary to take them out of the ground, ſo as green ſpring food may be obtained. Farm labour ſeldom was in ſuch a forward ſtate; and provender of every kind is plentiful. As for hay, no ſales can be made; nor is it likely that any demand of conſequence will ariſe during the enſuing quarter, the moſt of people being fully ſupplied.

Wheat and barley yield tolerably well, and, both in reſpect of quantity and quality, may be rated as equal to an average of years. Oats, however, are defective, and yield leſs meal than uſual. The demand for grain has been ſteady, and at decent prices. Wheat ſtarted at 30s., then to 35s., and ſome as high as 40s. per boll, which is about 7 *per cent.* more than four Wincheſter buſhels. Barley 25s. to 28s. per boll of 6 buſhels, with the addition of the above per centage; and Oats 20s. to 27s. per boll of 7½ buſhels, and a proportional per centage. Oat-meal 24s. per boll of nine ſtone Dutch; and Barley-meal 18s. per boll of ten ſtone. The butcher market is well ſupplied with Beef and Mutton, at 5d. and 6d. per lib. Labourers wages, ſince the commencement of the Caledonian Canal, have got out of all bounds. Ordinary hands juſt now are getting 2s. per day; and in a few weeks 2s. 6d. and 3s. will be given. The excavation of that great national work goes on briſkly; but, as uſual, at this ſeaſon of the year, nothing is done at the locks.——*27th Jan.*

Morayſhire Quarterly Report.

AN unuſually open and mild winter, ſo far as is paſſed, has, in the dry ſoils of this county, permitted farm labour to be carried forward with very little interruption, while our marſh and clay ſoils are much ſoaked, and would have reaped more benefit from froſt and ſnow; but the ſeaſon has been favourable to a very important branch of our agricultural ſyſtem,—wintering of ſtots for the grazier. From the great abundance of foggage, plenty of ſtraw, and a good crop of turnips, our farmers are enabled to do them every juſtice; and as this part of their buſineſs is now well underſtood, and carefully attended to, dealers, in the month of April, will find a greater number of prime cattle, than was ever before ſhewn in this quarter.

The price of wheat ſet in, about the 10th of laſt month, in general,

at 35s. per boll; and this article, of good quality, has continued in demand at that; in ſome inſtances, at higher prices. Barley was readily bought ſome weeks ago at 22s. 6d. to 23s. 3d. per boll, money; and on bargains at time, for 25s. to 26s.; but ſince the report of diſtilling from ſugar went abroad, few ſales can be made; and if this meaſure is tolerated, inferior quality, at any rate, muſt remain a perfect drug on the grower's hands. Oats ſell readily at 21s. to 22s. 6d. per five firlots, money; and ſome parcels have given 24s., Whitſunday payment, deliverable in a month or two hence.

We are going on in rural and local improvements with conſiderable ſpirit in this county; beſides the private efforts of numerous individuals in this way, among which may be mentioned the drainage of the Spynie Lake, ſaid to be now reſolved on by the noblemen and gentlemen proprietors, by which a thouſand acres will be reclaimed, we have to announce the completion of one ſtage of the intended turnpike road, twelve miles from Elgin to Forres, which the Truſtees propoſe to open for public accommodation on the 20th of March; and they will afterwards no doubt proceed with the other parts of the road, ſo as the chain of turnpike may be continued unbroken from London to Inverneſs. Our croſs roads are alſo daily improving, under the direction of commiſſioners for the commutation act; ſo that, in a few years, the county of Moray will poſſeſs what it has ever been in want of, the comfort and convenience of good roads.

Connected with theſe, and of infinite importance to the agricultural and commercial intereſt of this diſtrict, is the rapid progreſs making in the new harbour of Burghead, the general utility of which, government are ſo ſenſible of, that, with a liberality which reflects the higheſt honour, public aid to a conſiderable amount has been granted to the proprietors. Thus patronized and encouraged, they will probably, in the enſuing ſummer, have completed the beſt harbour (Cromarty excepted) in the Moray Frith; and for wind-bound veſſels, in many inſtances, inferior to none. The facility hereby afforded for ſhipping grain to the ſouthern markets during winter and ſpring, which was not poſſible from any of our other harbours, is an advantage of high importance to the agriculture of the county.

The damage done by the hurricane of Chriſtmas day, to roofs, fences, hay and corn ricks, was conſiderable; but, compared with the awful effects it produced at ſea, on this coaſt, was nothing.

The mildneſs and calmneſs of the morning tempted ſeveral boats out to the fiſhing; on their return about noon, the gale had increaſed to ſuch a furious height, that in ſpite of the moſt ſtrenuous exertions of the crews of three boats (twenty-one men) belonging to Stotfield, in ſight of their wives and children, and within one mile of their homes—all periſhed! This dreadful calamity has ſwept away *every perſon* able to aid the poor remaining ſufferers, whoſe numbers and miſery call loudly on the liberality of the opulent and humane, in every quarter, for aſſiſtance and relief. On the ſame tremendous day, periſhed three ſeamen

of

of Burghead in a boat, within a few yards of the ſhore. Thus, are twenty widows, with children, and aged men, amounting to ſixty perſons, by this diſpenſation, thrown on the bounty of the public. Their peculiar habits now rendered uſeleſs to them, alſo unfit them for any other branch of induſtry, by which they might procure the neceſſaries of life. It is hoped that a caſe of ſuch extenſive and poignant diſtreſs will move every liberal mind to contribute to the fatherleſs, and thoſe that have none to help. Donations for this benevolent purpoſe will be thankfully received, however ſmall, and faithfully applied, if paid in to the hands of Meſſrs Conſtable & Co., booksellers, Edinburgh; or to the Reverend Mr Lewis Gordon, miniſter of Drainie, near Elgin.——*28th January.*

Eaſt-Lothian Quarterly Report.

The uncommon wetneſs ſince the thunder ſtorms in July and Auguſt, has been remarkably unfavourable to the huſbandry of this diſtrict, a greater part of which is kept under the plough, than of any other diſtrict in Scotland. It was ſtated in the November report, that the ſummer fallows were imperfectly cleaned, the ſeed proceſs of wheat retarded, and field work of every ſort behind; and it may now be added, that the ſtate of the weather afterwards, furniſhed few opportunities, either of correcting former defects, or executing the ſeveral operations which, in a particular manner, belong to that ſeaſon of the year. The ſowing of wheat went on ſo long as it was in any ſhape practicable, though many fields were neceſſarily reſerved till the ſpring months. A larger quantity will therefore be ſown in February and March, ſhould the weather be propitious, than has been attempted ſince ſpring 1800, when one half, at leaſt, of the wheat-ſeed in this county was accompliſhed.

To ſpeculate upon the probable conſequences of ſix months wet weather to the huſbandry of Eaſt-Lothian, might furniſh amuſement to ſome, were this the proper place. Suffice it to ſay, that whatever may be its effects upon the next crop, undoubtedly the condition of the ground will, in nine caſes out of ten, be thereby conſiderably deteriorated. The wheat lands muſt be injured ſeverely by the wet and imperfect harrowing too often given, while the arable land of every kind which received a furrow, was thereby neceſſarily more or leſs damaged. The extent of theſe evils will, in a great meaſure, be regulated by the weather afterwards; for a good and genial ſpring and ſummer might ſave the ſeveral crops, while a year or two of dry weather would admit ſuch huſbandry to be executed, as would reſtore the ground to its uſual condition. Be theſe things as they may, the general wetneſs has, in the mean time, occaſioned a loſs which can hardly be remedied. It ſubjected the arable farmer to heavy expenſes, in ſupporting his working ſtock, while little benefit was derived from their labour; and, what is worſe, it occaſioned double fatigue to them when employed, by which their condition was impaired, and their value conſiderably leſſened. In ſhort, wet weather is highly deſtructive to the arable farmer, and brings evils

along with it, not to be averted altogether by the moſt dexterous induſtry; though, undoubtedly, by a ſedulous attention to circumſtances, they may be leſſened, and partially obviated.

The grain market has kept pretty ſteady in point of demand, and prices have advanced, at leaſt thoſe of wheat, from ten to fifteen *per cent.* Barley, though not plentiful, continues a heavy article, and oats are in requeſt more for the London and other markets, than for home conſumption. Stack-yards are tolerably thinned, being much more ſo than laſt year at this time. From this circumſtance, it may be inferred, that markets will ſoon look up, becauſe importation can only be executed upon a contracted ſcale, and eſpecially becauſe the waſte and deſtruction exerciſed on the Continent, muſt, whoever prevails, leſſen ſupplies from the uſual parts, even allowing that the allies are completely ſucceſsful.

Fat cattle have, ſince laſt report, rather declined in price, chiefly owing to the fall upon hides and tallow, which may be computed at ſixpence per ſtone of the animal. Sheep, however, have fully maintained former prices; thoſe fed on turnips, already marketed, having yielded a decent profit. It deſerves remark, that ſheep, for turnip feed, were cheaper purchaſed than cattle; therefore a better return to the feeder was a neceſſary conſequence, eſpecially when it is conſidered that the former are uſually reckoned the moſt profitable ſtock. The great object of cattle-feeding, is to produce dung, an article juſtly regarded as the ſheet-anchor of a corn-farmer; and though the profit this way may be leſs in the firſt inſtance, and gained with greater trouble and outlay, yet ultimately this practice may turn out more profitable and advantageous than the other.

Land-rent, as appears from recent ſets, continues on the increaſe; and when it is conſidered that, under the act of laſt Seſſion, the greateſt part of this diſtrict will be rated at two ſhillings and ſixpence, ſome of it at five ſhillings per acre, to the Property-tax, the general ſituation of farmers will not be viewed as enviable. In fact, the occupation, under exiſting circumſtances, may be characterized as one eminently hazardous. Should the nation increaſe in proſperity—ſhould money continue to fall in value, and the prices of produce *nominally* advance, then the farmer may maintain his place in the ſcale of ſociety. But ſhould national affairs take a retrograde courſe—ſhould trade decreaſe, and money advance in value, circumſtances all within the verge of probability, then the value of produce will inſtantly be depreciated, and the farmer reduced to a ſtate of bankruptcy, ruin, miſery and woe.—*Jan.* 30.

ENGLAND.

Letter from a Gentleman in Lincolnſhire, 20th January.

'I HAVE little intelligence to give you of agricultural matters, further than that our fine drainage works begin now to ſhew themſelves, and in the end will do great credit to Mr Rennie, the engineer, as being the moſt

moſt complete drainage that ever was made in Lincolnſhire, and perhaps in England. I have been a commiſſioner in many drainages; but the proprietors never would ſuffer us to raiſe money ſufficient to dig deep enough through the old encloſures into the ſea, before; and, notwithſtanding the excellency of Mr Rennie's plan, we have a party of uninformed people, headed by a little parſon and magiſtrate, who keep publiſhing in the newſpapers to ſtop the work, and have actually petitioned Sir Joſeph Banks, the lord of the manor, againſt it; but he anſwered them with a refuſal, in a moſt excellent letter, a copy of which will probably be ſent you afterwards.

'Prices of corn and meat may be conſidered as good. Wheat, 64s. to 76s. per quarter; Barley, 38s. to 42s.; Oats, 21s. to 30s.; Beans, 32s. to 42s. Beef, 7d. per ſtone, ſink; Mutton, from 6d. to 7d. per lib., prices rather increaſing; Pork, about from 6s. 6d. to 7s. per ſtone of 14 lib.

'I think Mr Rennie's great work will promote another general improvement here, that is, to deepen and enlarge the river Witham from the ſea, through Boſton and Lincoln, to the Trent, ſo as to admit of a communication for large veſſels, as well as laying the water ſo much below the ſurface of the land as to do away the engines. We have got an eſtimate, and find the coſt may be about 100,000l.'

Letter from a Yorkſhire Farmer.

'The weather was ſo extremely wet during the months of November and December, that little buſineſs could be done in the fields, except ſowing ſome wheat upon dry ſoils after turnips. This mode of huſbandry is now practiſed to a great extent, and, by conſuming the turnips early, anſwers very well. We had a remarkably fine autumn, and the ſeed wheats were ſeldom got into the ground in better order; the ſeaſon continuing ſo very warm and moiſt, that upon good dry land, the plants have got too luxuriant, and ſpent too much ſtrength before winter. Upon cold, wet land, the plants are very weak and ſickly. But dry weather ſet in with the New Year, and ſome gentle froſts have ſeaſonably checked both wheat and turnips, the latter of which were running into the ſeed ſtalk. The weather has been ſo very open, that great part of our lean cattle continued in paſture till the beginning of this month, as the graſs kept growing upon rich good land. Our markets are plentifully ſupplied with both beaſts and ſheep, particularly the latter. Cattle ſell at 6s. 6d. to 7s. per ſtone of 14 lib. ſink; Sheep, 6½d. to 7½d. per lib. do. This county appears to be full of fat ſheep. The high price of mutton has encouraged the ſtock-maſters, to increaſe their numbers, and the laſt year's profits to the grazier, induced every one to buy a larger ſtock than uſual for turnip feed; and, notwithſtanding the favourable winter, moſt people find themſelves overſtocked, and, of courſe, the markets are abundantly ſupplied, which cauſes a heavy ſale, and gives the butchers large profits. We have not had the leaſt ſnow, till this preſent evening. It is now falling, and has covered the ground.

'Our

'Our corn markets continue pretty ſteady. I believe fine wheat is cheaper at Wakefield and the neighbouring markets, than in any other part of England, the beſt not being worth more than 9s. the Wincheſter buſhel. This article is expected to advance by ſome of our factors, on account of the great devaſtation and waſte committed on the Continent by the contending armies. But our crop is great, and yields well under the flail, which will prevent the neceſſity of importation; and, probably, the ſpeculators may be diſappointed. Barley, oats and beans come plentifully to market, and their prices are upon the decline. Barley, from 4s. 6d. to 5s. 3d. per Wincheſter buſhel; Oats, from 3s. to 3s. 9d.; Beans, 5s. 3d. to 5s. 9d.

Eſſex Quarterly Report.

THE winter quarter has hitherto been remarkable for the great temperature of the weather, as well as for the great quantity of rain which has fallen. We do not recollect to have had one froſt in the month of December, which was by many farmers rather wiſhed for, as the ſlug has made conſiderable depredations upon the young wheats, although, upon the whole, we may report thoſe plants to be in a flouriſhing condition. At the commencement of the New Year, a ſharp froſt ſet in for a few days, which was eagerly embraced by every agriculturiſt for carting manure upon the young clovers, which had not been accompliſhed before Michaelmas. *Winrows* alſo, which had been dug up, were drawn on thoſe lands intended for fallows, &c.; and in a few weeks we ſhall be buſily employed in ſowing beans. Our wheat, we hope, is not leſs deficient than laſt year. Barley riſes well upon ſome ſoils, and upon others as bad. We know an inſtance of two farmers, who, were they each to give an account of the produce of their own lands, would greatly differ, although the diſtance may not be five miles apart: the one would tell you, his would average about ſeven quarters per acre, the other about three. Peas and beans were not more than half a crop; oats yield a tolerable quantity. Our markets have been much lower for barley, ſince the queſtion reſpecting the diſtillation from ſugar has been agitated. At Braintree market, laſt week, this article ſold from 35s. to 39s. Trefoil and clover are amazingly dull. Sheep are ſcarce. The jobbers aſk as high as 36s. for ordinary ewes; and ſtock of all kinds are dear. There is a great demand for ſtraw for litter; and, in ſome parts of this county, it is ſold as high as 30s. and upwards per pound weight, after being manufactured. This is the caſe where the manufactory for ſtraw bonnets is carried on, which, in ſome places, is an extenſive trade. This morning the ground was ſlightly covered with ſnow, which is the firſt we have ſeen this ſeaſon; but it has now all diſappeared.——*Jan.* 23.

Norfolk Quarterly Report.

THE harveſt having been finiſhed early, and the ſucceeding month proving extremely favourable for ſowing wheat, that crop was put into the ground in excellent time, and in fine condition. It has acquired a proud and healthy appearance; and no fears can be entertained for it, except ſuch as may ariſe from a ſuſpicion of too thick a plant. Winter vetches,

vetches, from the ſame cauſe, are very flouriſhing. The turnip alſo begins to exhibit ſymptoms of a rapid increaſe of top; and though far from a good crop, will in all probability be found fully adequate to the maintenance of the ſtock of the county, which is not ſo numerous as uſual, the farmers, from the well aſcertained deficiency in the quantity of ſtraw, and from an apprehenſion that the turnips will not prove at beſt an average crop, having been cautious in purchaſing both ſheep and bullocks. But ſuch has been, ever ſince harveſt, and ſtill is, the unuſual verdure of the county in general, that the turnip was not early reſorted to, and even but partially, till very late in the ſeaſon.

Wool is improving in value; an object of importance to many of the Norfolk farmers; the buyers and ſellers differing ſo materially at the Thetford wool fair, that few ſales were effected. The wheat crop is fully an average one; a plentiful ſtock appears to remain in hand; the price has been ſteady, and, by reaſonable minds, muſt be deemed good. Barley will prove more productive than was expected, and may average three quarters per acre. This article has lately declined in price; but owing to what cauſe is difficult to ſtate. Moſt of the few ſtacks which adorned the fields immediately after harveſt have diſappeared, and the quantity in hand certainly cannot be great: perhaps the idea that ſugar will be uſed by the diſtillers as a ſubſtitute for it, may have had ſome effect. The pea crop is miſerably defective, particularly the white, and more particularly ſtill the pearl, which is much in faſhion in this county, from its proving univerſally a good *breaker*; in time of war, a very material conſideration. It will not average more than twelve buſhels per acre. The grey may perhaps reach 2½ quarters, or 20 buſhels. The farmer, however, notwithſtanding the deficiency in the pea and barley crop, will not, it is hoped, find the balance of account againſt him.——23. *Jan.*

Letter from a Farmer in the Eaſt Riding of Yorkſhire, Jan. 24.

'From the date of my laſt letter till the 16th or 17th November, the weather continued very fine and dry; the wheat ſowing being finiſhed in as complete order as ever remembered in this diſtrict; and every operation uſually executed at that ſeaſon of the year, was got into a forward ſtate. The wheat fields look more luxuriant than I ever ſaw them in the month of January, not having received a check by froſt till about a fortnight paſt, and that but ſlightly. The rainy, warm weather we had from the middle of November till the firſt week in January, kept up vegetation in a high degree. Snow, we have had none yet. The turnip crop having failed in ſo many inſtances, as to have enhanced the value of that root more than was expected, and as the ſheep graziers cannot be ſupplied with a ſufficiency for their flocks, they are thereby obliged to drive them to market; and, in ſome inſtances, they are ſold for an advance in price of only 2s. per head from September laſt. Six guineas per acre is given for very indifferent crops of turnips; and 8d. per week is aſked, and I believe given, for *hoggets*. Our grain ſeems to turn out as was anticipated: wheat good in quality; oats light; barley

barley thin; and beans ſmall and ſhrivelled. Prices for Wheat, 70s. to 74s.; Oats, 20s to 26s.; Barley, 35s. to 39s.; Beans, 36s. to 38s. —all per quarter. Fat cattle are now worth 7s. 6d. per ſtone, ſink, which will not do for thoſe fed on linſeed cake: it cannot be bought for leſs than thirteen guineas per ton, and much of it is uſed in this neighbourhood Sheep 6d. to 7d. per lib. ſink; Veal, 8d. per lib.; fat Pigs, 6s. 6d. per ſtone.

'Flax has turned out a bad crop, large quantities being almoſt unworkable. It is ſhort, and not having more than 10 to 15 and 20 ſtone per acre; 40 ſtone per acre is a rarity. There are many inſtances of 8 guineas per acre being given for land to ſow with this crop; and the produce being not more than 20 ſtone per acre, and ſold at 13s. to 13s. 6d. per ſtone, the reſult is high prices. Large tracts of land are to be ſown with it this year.

'This diſtrict is not one of thoſe that affords many inſtances of rural improvements on an extenſive ſcale; in fact, there are none that you are not previouſly informed of, except a gradual one of cultivation in general.'

Letter from a Gentleman in the County of Kent, 25th January.

'I HAVE received the Numbers of the Farmer's Magazine perfectly regular, except the laſt, which has not reached me, and am highly indebted to you for them. From the mild open winter we have experienced, the farmers have not been enabled to carry out their manure for beans; and the ſpring ſeed ſeaſon will neceſſarily be very backward. The wheats on the ground look well, in general, on moſt ſoils in this diſtrict. The yield of the laſt crop of wheat, conſidering its bulk, is better than was at firſt expected. The laſt markets were as under.

Canterbury, January 10.	*Ditto, Jan.* 17.	*Maidſtone, Jan.* 15.
Wheat (brown) 80s. to 86s.	80s. to 86s.	Wheat 78s. to 91s.
Do. (white) 75s. — 90s.	80s. — 92s.	
Rye - - - 46s. — 50s.	46s. — 50s.	
Barley - - 38s. — 45s.	38s. — 44s.	— 38s. — 47s.
Oats - - - 30s. — 38s.	30s. — 38s.	— 28s. — 41s.
Beans - - - 42s. — 44s.	40s. — 42s.	— 42s. — 52s.
Ticks - - - 45s. — 48s.	44s. — 46s.	
Hog Peas - 48s. — 50s.	46s. — 50s.	— 42s. — 50s.
Boilers - - 75s. — 85s.	70s. — 80s.	— 60s. — 78s.
Tares - - - 56s. — 66s.	56s. — 64s.	
Malt - - - 92s. — 94s.	92s. — 94s.	*Sandwich, Jan.* 21.
Hay, per ton, 4l. to 4l. 5s.		Wheat 74s. to 88s.
Sainfoin - 4l. 10s. to 5l.		Barley 38s. — 40s.
Clover - - 3l. 10s. to 4l.		
Oat Straw - 2l. 5s.		

'*Canterbury Butcher Market, January* 18.

Fine Flour 71s. per ſack.
Rough Meal, 40s. per ſack.
Beef, 11s. 6d. to 13s. per ſcore.
Mutton, 5s. 4d. to 5s. 6d. per ſtone.

Aſhford,

'*Aſhford, January* 20.

Beef, 12s. to 13s. 4d. per ſcore.
Mutton, 5s. 4d. to 5s. 6d. per ſtone.
Fat Pork, 13s. 6d. per ſcore.
Freſh Butter, 1s. 6d. per lib.

'The hop duty for 1806 is 253,558l. 2d. The old duty, therefore, is about 145,795l.'

Letter from Lynn, 25th January.

'OUR markets are now well ſupplied with all ſorts of grain, except white peas; and we have a pleaſure in obſerving, that the quality of the wheat has turned out far ſuperior to any expectation of ours. Indeed, we think it equal to that of moſt years, and have no doubt but the beſt runs will average from 59 to 60 lib. per buſhel. The preſent price given to the growers is from 70s. to 72s.; and fine ſamples 74s. per quarter. Barley, though not ſo heavy as laſt year, is of good malting quality, the price now very low, no more than 34s. to 35s. per quarter, in conſequence of every conſumer of this article holding off buying till it is known whether ſugar and molaſſes will be ſubſtituted in lieu of grain by the diſtillers and brewers. We think this ſubſtitution never will take place, as government would be ſuch ſevere ſufferers in the malt-duty. So ſoon as the Houſe of Commons have come to a determination, we have no doubt barley will advance, though at preſent it is a drooping article. When there is the leaſt appearance of advance, all will hold off ſelling; though, at this time, the growers are certainly forward in thraſhing. White peas cannot be bought under 80s. to 82s. Grey peas 40s. to 42s. per quarter, very fine quality. Beans do not yet come hard to market, and are bought at 36s. to 38s. Oats vary very much; the great ſupply is ſo light as 30 and 32 lib. per buſhel, which are bought at 20s. to 21s. per quarter, and thoſe of 33 to 34 lib. per buſhel at 22s. to 23s. per quarter. A middling ſupply of 35 lib. per buſhel at 23s. to 24s., and a few appear ſo heavy as 36 to 38 lib., which are bought at 26s. to 28s. per quarter. The meat market has been pretty well ſupplied. Beef ſells at 7s. 6d. per ſtone of 14 lib. ſink; Mutton at 8s. 9d. per ſtone; Veal 9s. 4d. per ſtone; and Pork 8s 9d. per ſtone.'

Yorkſhire Quarterly Report.

THE produce in the barn from wheat of laſt year turns out tolerably good, though the ſample is not perfectly free from dampneſs in the hand, occaſioned by the very ſhowery weather prevalent during the greater part of harveſt. The intervals of fair days were not ſufficient to dry the grain completely; yet moſt of the ſamples are moderately ſaleable.

Barley yields thinly under the flail, and is now ſelling at a price by no means adequate to the deficiency. This probably may in part be attributed to the enormous quantity of ſugar on hand with the merchants, which, for want of a market, muſt be converted into drink or *poiſon* of ſome ſort or other. Rye, oats, and beans and peas, turn out rather more than an average produce.

The preſent market price of grain, in general, is too low for the grower,

grower, all circumſtances conſidered; and if we may preſume, from the uncommon fineneſs of the winter hitherto, that any ſmaller proportion of grain is now actually thraſhed out, than is uſually the caſe at this time of the year, there may not be much reaſon to expect an improvement. The beſt wheat is about 9s.; Rye 5s. 6d.; Barley 5s. 3d.; Oats 3s.; Beans and Peas 5s. 6d. per buſhel of Wincheſter. Potatoes are abundant, from 1s. 6d. to 2s. per buſhel, upheaped.

A conſiderable proportion of our arable land is now covered with wheat, growing with the greateſt luxuriance, in general, on all ſorts of ſoils: perhaps ſome of them have grown too much, from the continual rains of the early part of the winter, and the uncommon mildneſs of the weather at the preſent period.

Some flocks of ſheep have ſuffered partially from the rot, but by no means to the extent apprehended by many, the rains falling *late* in the ſeaſon. The wethers fattening on turnips are now thriving faſt; during the heavy rains before Chriſtmas they gained but little fleſh. Though without any cover of ſnow, the turnip crops are not materially injured by froſt; but in the forward ſandy ſoils, they are faſt running to ſeed, and, conſequently, will not ſerve *late* in the ſeaſon.

Fat and lean cattle are as moderate in price as for ſome time paſt; ſheep dearer. Store pigs are alſo high. Beef, mutton, and pork, 7d.; veal 8d. per lib. Horſes are nearly the ſame as laſt reported.—*Jan.* 25.

Northumberland Quarterly Report.

For the laſt quarter, the weather has been one of thoſe ſingularities that will be often quoted in after times, as probably few perſons remember ſuch another ſeaſon, and particularly that part which comes under the denomination of winter, there having been only three days of froſt, and thoſe at three different times ſince the beginning of December, and without the leaſt fall of ſnow. The month of December was remarkably wet, there being ſcarcely two fair days together, and on the 25th a moſt violent hurricane of wind, that did much miſchief; but, during the whole of this period, except the ſmall portion of froſt above mentioned, the air was ſo mild, that vegetation proceeded with the ſame vigour as is frequently obſerved in October; and the graſs lands continued to ſupport a greater quantity of ſtock than was ever experienced at the ſame ſeaſon, which has been a great ſaving of fodder of every deſcription.

The ſame mild temperature of air that produced ſuch vegetation in the graſs, has been equally friendly to the autumn ſown wheats, which, on all deſcriptions of ſoil, have a moſt favourable appearance, in every part of the county; and, it may be added, that the writer of this report, in a recent journey through the midland and ſouthern counties, every where obſerved a ſimilar appearance.

The turnips that were ſown late in the ſeaſon, after the firſt ſowing had been deſtroyed, and which were expected to get only to a ſmall ſize, have, from the ſame cauſes which produced ſuch verdure in the graſs and wheats, gotten much larger than was expected, and will in ſome meaſure make up the deficiencies of thoſe crops that came up partially,

tially, or at two growths, and which occupy a very considerable portion of the turnip soils of this county. The crops upon good lands were never better; upon moist lands and strong loams, the ruta baga was starved, and of course stunted in its growth. On all such soils the crop is very deficient. Potatoes are in general good.

The ploughing for the next summer's fallows, as well as for spring seeds, is in great forwardness; and the lands that have been cleared of turnips are now sowing with wheat. Markets are much the same as in the last quarter. —— *January 25th.*

Letter from London, January 26.

'NOTWITHSTANDING the interruption to our foreign supplies of grain, the market has been so well filled with wheat and oats, since our last report, that prices have been on the decline. This, we think, is not owing to the crops having turned out better than had been calculated upon, but from the increasing quantity of land taken into cultivation. With regard to wheat, our stock is plentifully kept up by supplies from the coast, in addition to the usual neighbouring channels; and the condition of the grain, from the moistness of the season, is so soft, that our millers are discouraged from laying up any great stores. The sales are therefore heavy; and we can only look to a rise in the price of wheat, in case of a material falling off in our supplies. The idea which has been prevailing, that some relief would be given to the West India trade, by allowing the brewers and distillers to use sugar and molasses, has caused a considerable dulness in the sales of barley and malt, which they have only in a small degree recovered from, now that this expectation is nearly given up; the supplies of these articles being very liberal. Indeed, we do not remember to have seen our market so full of grain in general, as it has been from the commencement of the New Year to this time. Our annexed quotation for oats is at a reduction of two or three shillings within this last month, which is to be attributed solely to large quantities from the coast. If these can be continued, no advance in price need be looked for; but as our consumption will, from this time to the summer, be on a large scale, it is reasonable to expect the deprivation of foreign arrivals will be felt.

'The stock of clover-seed on hand is considerable; but as the last crop failed materially, a greater demand may be expected upon this market, than for two or three years past: indeed, prices have already advanced. Still, much will depend upon the event of the violent steps with regard to the commercial intercourse of the Continent with this country being departed from or not. The supply of grey peas has been larger than was generally looked for, and prices have declined; but boiling peas are still looking upwards, the demand for the shipping being considerable.

'State of London Markets, Jan. 25.

Wheat - - -	56s. to 75s.	
—— White Essex and Kent	84s. 86s. — 88s.	
—— Norfolk - -	68s. 76s. — 80s.	
—— Scotch - -	68s. — 72s.	Fine, 74s. to 77s.

Wheat,

Wheat, Northumberland	-	80s.	
—— Dantzic and Zealand	65s. 80s. to 88s.		
—— Riga and Peterſburgh	56s. — 66s.		
—— Archangel -	48s. 56s. — 63s.		
—— Black Wheat -	63s. — 70s.		
Rye - - -	46s. — 48s.		
Barley - - - -	34s. — 37s.		
—— Good Malting -	40s. — 41s.	Fine, 42s.	
Malt - - -	56s. 66s. — 72s.	Fine Norfolk, 75s. 78s.	
White Peas . - -	68s. — 78s.	Boilers, 86s. 92s.	
Grey ditto - . -	42s. — 46s.		
Pigeon Beans (old) -	46s. — 50s.	New, 42s. 44s.	
Tick ditto (old) - -	40s. — 44s.	New, 34s. 37s.	
Oats, Long Feed - -	22s. — 26s.		
—— Short Smalls or Friezlands,	26s. — 29s.	Fine, 30s. 6d.	
—— Polands - - -	26s. — 29s.		
———— Fine - -	30s. — 33s.	Extra, 34s.	
—— Potato - - -	31s. — 33s. 6d.		
Red Clover ſeed, New Engliſh	65s. 84s. — 92s.	per cwt.	
Ditto ditto Old Foreign	44s. — 50s.	French, 70s. 78s.	
Ditto ditto New ditto	66s. — 72s.	Ditto to 82s.	
White Clover ſeed -	60s. 95s. — 105s.		
Trefoil - - -	10s. 21s. — 30s.		

Fine Flour—delivered to the bakers 70s. — 75s. per ſack.
Flour by ſhipping—no ſales made.
Hay, from 4l. to 4l. 15s. per load.
Straw, 56s. to 63s. per load.

Letter from Wales, 25th January.

'SINCE I laſt wrote you, we have had a ſucceſſion of heavy rains, and great floods; of courſe, farm-work lies far behind. Thraſhing is the principal buſineſs that has been attended to; and I believe there is more than the ordinary quantity of corn gone from the farmers. Cattle have been dull of ſale, and corn has been reſorted to, to make good our payments, which has cauſed a glut in our markets; conſequently, prices are rather on the decline. Wheat, of the beſt quality, does not at preſent fetch more than 26s. and 27s. our buſhel, of 168 pounds weight. Barley, at the firſt of the ſeaſon, was at 44s., but will not at preſent bring more than 40s. the quarter. Oats, about 23s. to 24s.; Potatoe oats (which prove far ſuperior to the oatmeal makers) go to 28s. and 29s.; Peas have been about 50s. the quarter. I have not heard of any beans being ſold. We have had no froſts to check the growing wheats, which every where look well, ſo that ſome farmers begin to cry out, it is getting on too faſt. Whether that is the caſe or not, time muſt try. Turnips, in many places, begin to run to ſeed; and many of my neighbours complain, that the ſheep on them get no better, their coats being conſtantly wet and dirty. Butcher meat was plentiful at market, for two months before Chriſtmas, and at a reduced price, but is now advancing nearly to what it was for the two or three laſt years; and both cattle

tle and ſheep that are fat, go off readily. Store pigs continue to ſell very dear; and fat pigs for bacon, weighed whole, viz. head, feet, &c. ſell at 6d. and 6½d. per pound. Butter, 14d. and 15d. per pound; Cheeſe, from 4d. to 9d., according to the quality. Potatoes are in great plenty, and will hardly pay for carrying to market. Good hay is worth five pounds the ton; but, in the courſe of my journey laſt week, about thirty miles north from this, on finding fault with the hay, as my horſe would not touch it, the landlord declared it coſt him nine pounds the ton, and that there was none to be got under that price, and that ſtraw and oats were in proportion. At the ſame time, I could not obſerve any ſpirit of improvement amongſt the farmers; but I have no doubt they will ſoon open their eyes. Their employment now ſeems to be in picking up iron ore, and keeping a few ſmall horſes to carry it to the ſides of the roads, which they ſell to the works for ready money, by which they juſt make a living. I ſpent one day with a farmer who holds near 500 acres, one half of which is well encloſed with good hedges, his rent next to nothing. He ſaid they never miſs good wheat and oats, although they ſow but very little of either; as a proof of which, he fallowed about an acre laſt year for wheat, which was all he meant to have. He had given it a good dreſſing of dung and lime, but could not ſpare as much time as ſpread either the lime or the dung;—there it reſts, ready, as he ſays, for next year. The little wheat I ſaw is looking well; and I have no doubt but, ſome years hence, that part of the country will have undergone a great change. They are now getting good roads. Indeed, the making of iron-rail roads, and building new works, ſeems to engroſs the whole attention of the monied men; when that is a little abated, it is moſt likely they will look to the ſtate of the lands round them, and raiſe provender for men and horſes at a cheaper rate than at preſent.'

OBITUARY.

Died lately, at Edinburgh, in the 70th year of his age, General JOHN FLETCHER CAMPBELL OF SALTON.

General Fletcher Campbell was the youngeſt ſon of Andrew Fletcher, Eſq. of Milton, Lord Juſtice-Clerk of Scotland, who, under the auſpices of Archibald, Duke of Argyle, managed the internal government of that country for many years, and, in 1803, on the death of his brother General Henry Fletcher, ſucceeded to the patrimonial eſtate of Salton in Eaſt-Lothian, having formerly poſſeſſed the eſtate of Bocquhan in Stirlingſhire. Deſcended from a race of eminent men, General Fletcher Campbell, gifted with talents of the greateſt celebrity, was qualified to imitate his anceſtors, and to diſcharge every public duty with credit to himſelf, and advantage to the community. He had ſtudied the book of life with minute attention, and was enabled to make remarks thereupon, which diſplayed the capacity of his mind, and the vigour of his underſtanding. As generally happens with all great characters, ſome traits of eccentricity might be diſcovered in his appearance and behaviour; but theſe rather ſerved as foils to ſet off his

benevolence and numerous good qualities, than to impair his uſefulneſs, or detract from his merits. In ſhort, the features of his mind were deeply marked, and conveyed to the beholder, on the ſlighteſt glance, full proofs of his activity and diſcernment; while his conduct or actions expreſſed an animated deſire to benefit ſociety, and improve the intereſt of thoſe with whom he was connected.

When General Fletcher Campbell ſucceeded to the patrimonial eſtate of Salton, many branches of its economy were in a diſordered and confuſed ſtate, owing in a great meaſure to the invalided condition of his brother for ſeveral years previous to his deceaſe. To remedy theſe diſorders, and improve the patrimony deſcending to him from his anceſtors, were therefore the General's firſt and earlieſt care; and in a ſhort time he accompliſhed many durable and efficient improvements. The alterations upon the manſion-houſe, and the elegant offices built by him, diſplay much taſte and judgment in architecture, as do alſo a new church with a lofty ſpire, and a ſchool and houſe for the ſchoolmaſter, built at his ſole expenſe. He had in contemplation to make many alterations in the village of Salton, thereby to beautify the property, and add to the comfort of the inhabitants, and was at the chief expenſe of building a ſtone-bridge acroſs a dangerous paſs upon the river Tyne, by which an eaſy communication is now opened for a great diſtrict of the county to the market town. He likewiſe expended conſiderable ſums in making and repairing ſundry uſeful roads in the neighbourhood, and, in ſhort, manifeſted an eager deſire to forward every ſcheme which had for its object the welfare and advantage of the public. He alſo inſtituted a club or meeting of farmers at Salton, and regularly preſided at their quarterly meetings; from which, in proceſs of time, laſting benefit might have been derived. As a ſolid proof of his deſire that the club ſhould be rendered a perpetual one, if poſſible, and not fall to pieces at the death of its inſtitutor, as has too often happened in ſimilar caſes, the General, by his laſt-will and teſtament, left *five hundred pounds* Sterling for their behoof, and the like ſum to the ſociety of farmers at Kippen in Stirlingſhire, another inſtitution which he countenanced and ſupported. Theſe ſums were conveyed to the Earl of Haddington, William Hay Newton, Eſq. of Newtonhall, and Henry Davidſon, Eſq. writer in Haddington, truſtees appointed for carrying the deed into execution, who are directed to lay out the money in the purchaſe of land, and to pay the annual proceeds to the reſpective clubs, by whom it is to be appropriated and expended in premiums for promoting and encouraging agriculture. In a word, we are at a loſs to aſcertain, whether the merit of theſe gifts, or the wiſdom and foreſight evidenced in the mode of beſtowing them, deſerve moſt applauſe. The memory of the donor, however, is entitled to reſpect on both accounts; and the writer of this article embraces the opportunity of paying a mite of approbation when recording ſuch an uncommon inſtance of liberality and beneficence.

General Fletcher Campbell was married ſome years ago, and has left two ſons, the eldeſt of whom ſucceeds him at Salton, and the other at Bocquhan.

Bocquhan. The two young gentlemen are under the inſpection and management of Mr William Graham, rector of the grammar ſchool at Haddington; a moſt reſpectable man, fully qualified to teach them every branch of uſeful education, and to train them up in a way which may afterwards render them uſeful members of ſociety. N.

Died at Edinburgh, on the 15th December 1806, WILLIAM LAW of Elvingſtone, Eſq. Advocate, late Sheriff of Haddingtonſhire.

This gentleman, born in 1714, was, at the time of his deceaſe, father of the Scotiſh Bar, having entered advocate in the year 1737, and probably the oldeſt Judge in Great Britain; having acted as Sheriff of the county of Haddington nearly for fifty years. In his judicative capacity, he was always regarded as a ſteady and upright adminiſtrator of our excellent laws, of which he poſſeſſed a clear and full conception; and, though rather irritable on the Bench, and diſpoſed to get warm, when people of different feelings would have remained ſilent, yet the goodneſs of his heart, and the rectitude of his intentions, were ſo well known, that he was rarely found fault with on theſe accounts. Mr Law was ſtrictly religious, and regularly attended the celebration of its ordinances. He for many years acted as elder for the Preſbytery of Haddington, in the General Aſſembly of the Church of Scotland, and was a zealous ſupporter of the politics of the ruling party. When at the great age of ninety, he was as eager to ſit out the vote as the youngeſt member of the houſe; and the charge of inconſiſtence and verſatility could at no time be applied to his conduct. He always meant well; and the moſt violent of his opponents had not a ſhadow of reaſon to challenge the rectitude of his intentions.

But the death of Mr Law more particularly deſerves to be recorded in a work intended to benefit Scotiſh agriculture, becauſe, both in his private and public capacity, he warmly promoted that art. He was the firſt man that introduced into Eaſt Lothian the uſeful practice of harrowing wheat lands in the ſpring months; thereby paving the way for the ſyſtem now generally adopted, of ſowing graſs ſeeds with that grain—a moſt beneficial practice of modern huſbandry. By him alſo was the plan firſt carried into action, of paying outgoing tenants for the dung ariſing from the penult crop, inſtead of allowing them to lay it upon land intended for carrying a crop of barley, which neceſſarily was their reſource in former times. It is believed this plan was never ſanctioned by the Superior Court; though every perſon, even thoſe of the moſt ſhallow capacity, muſt, upon conſideration, view it as well calculated to further the intereſt of agriculture and of the ſeveral parties. In ſhort, he was a good man and a juſt; therefore deſerving of being held up as a pattern for the imitation of thoſe who follow him.

Died at Haddington, on the 29th January 1807, in the 61ſt year of his age, ALEXANDER FRASER Eſq. Sheriff-clerk of that county, joint agent of the Bank of Scotland there, and deputy collector of aſſeſſed taxes.

Mr

Mr Fraſer, originally from Inverneſsſhire, had acted as Sheriff-clerk of Haddington for forty years, and in that capacity was eminently diſtinguiſhed for regularity and correctneſs. The writer of this article has known him intimately for twenty-five years, and enjoyed many opportunities of aſcertaining his character in theſe reſpects. In his connexion with agriculturiſts, as man of buſineſs to various country gentlemen, Mr Fraſer conſtantly diſplayed the ſtricteſt honour and integrity. While he diſcharged every duty with fidelity to his employer, he never ſhewed the ſmalleſt deſire to oppreſs, or impoſe unneceſſary burthens upon thoſe who in ſome meaſure were under his direction. A particular quality belonged to him, namely, the training of young men to habits of buſineſs; and it is believed that few of his profeſſion, holding his limited ſphere in view, were in this reſpect more generally ſucceſsful.

Mr Fraſer is ſucceeded in the agency of the Bank, by his ſon Mr Hugh Fraſer, a young gentleman of conſiderable abilities, who was regularly bred to buſineſs in a reſpectable law-houſe in Edinburgh. The agency has, ſince 1802, been executed by him in ſuch a way as has afforded the public great ſatisfaction.

NOTICES TO CORRESPONDENTS.

The *Review Branch* is poſtponed for this number; a delay neceſſary, on account of the large ſtock of original communications lately tranſmitted. Dr Dickſon's *Complete Body of Huſbandry*, two volumes 4to, is under examination, and will ſoon be noticed.

The *Letter from Cumberland* muſt be retouched. A trouble of this nature we never grudge, providing there is ſome ſenſe to work upon, and a portion of this does not ſeem wanting in the communication alluded to.

We are obliged to the author of the *Eſſay on Inverneſsſhire Huſbandry*, which ſhall be preſented as ſoon as poſſible, together with the excellent hints of *Amicus Scotiæ*, and the paper recently ſent us by our good friend S. E.

Strictures on the Plan for inſtituting evening Schools for Farm Servants, and various other papers, are under conſideration. A paper on Potatoe Huſbandry, by the Reverend Mr Campbell, is this moment come to hand.

No. XXX. will be publiſhed on Monday 11th of May.

ERRATA IN NO. XXVIII.

p. 434, 3d line from bottom, for *court regiſter*, read *county regiſter*.
p. 441, 17th line from top, for *moſtly*, read *moſt ineptly*.
p. 443, 19th line from top, for *found correſpondent*, read *found from being correſpondent*.

D. WILLISON, PRINTER, EDINBURGH.